JOURNAL MISSOURI STATE MEDICAL ASSOCIATION

Volume II MARCH, 1906 Number 9

ORIGINAL ARTICLES

MISTAKES IN THE DIAGNOSIS OF APPENDICITIS.*

By H. C. Dalton, M. D., St. Louis.

A great many factors serve to account for mistakes in the diagnosis of appendicitis. This little organ lies normally in the right iliac fossa at the junction of the ileum and ascending colon. It varies in length from a rudimentary papilla to nearly one foot in length, and being attached to the one point only to a partially movable caecum its extremity is freely movable. This mobility is the cause of a vast number of mistakes in diagnosis. While the appendix has no tendency to adhere to other structures in a normal state, it is very liable to do so when inflamed. It may become attached to contiguous intestine, to the ovary, uterus, rectum, etc.

Inflammation of the gall bladder is sometimes complicated by an adherent appendix. Quite frequently an appendix is found in hernia of right side and sometimes also on the left side.

In very rare cases the abdominal organs may be transposed and the appendix be on the left side, thus adding greatly to the difficulty of diagnosis. In rare cases a Meckel's diverticulum may exist in the lower part of the ileum, and an inflammation of this pouch may cause symptoms impossible of diagnosis. A case in point was that of a surgeon in St. Paul who operated for appendicitis and removed a diseased Meckel's diverticulum. A year or two later the patient had a genuine attack of appendicitis and another surgeon removed the appendix with the result that the first surgeon was sued for malpractice.

There can be no doubt that many abdominal as well as thoracic conditions have been diagnosticated as cases of appendicitis. The symptoms so perfectly simulate those due to an inflamed appendix, and the history is so obscure, that an accurate diagnosis is extremely difficult. It is, however, satisfactory to know that the symptoms are usually such as to enable the surgeon to realize the necessity of prompt surgical interference.

When we consider the frequency of appendicitis and remember the fact that both the profession and the laity have been led to believe that pain in the right iliac fossa, tenderness at McBurney's point,

* Read at Annual Meeting Missouri State Medical Association, Excelsior Springs, May, 1905.

fever, and rigidity of the right rectus muscle are pathognomonic of appendicitis, we are surprised that errors are not of more frequent occurrence. In some instances the symptoms so perfectly simulate those due to an inflamed appendix, as to render an accurate diagnosis well nigh impossible. Pleurisy and even neuralgia have often been mistaken for the disease. Dr. Janeway has reported several cases of neuralgia that were subjected to celiotomy because of the surgeon's failure to correctly estimate the value of the symptoms. The same error has been made in patients suffering from lead poisoning, infected gall bladder, hysteria, floating kidney, lumbar abscess, and what not. Muscular rigidity is one of the most constant symptoms of localized peritonitis, and when it is associated with severe pain in the right inguinal region, tenderness at McBurney's point, and fever, in other words when the clinical picture due to a localized peritonitis is present, the surgeon must painstakingly seek and find the cause instead of deceiving himself into the idea that the appendix *must* be the cause of the symptoms.

In the brief time allotted me I can but call attention to the more frequent affections that have been wrongly diagnosticated as appendicitis, trusting that these cases may awaken each and every member of this association to the importance of becoming fully conversant with every lesion that might be mistaken for an infected appendix.

Typhoid Fever.—The unnecessary opening of a typhoid fever patient's abdomen is a very serious and grave error. Many, or at least several, of the world's most renowned surgeons have erred in this particular. As a rule the muscular rigidity and tenderness is not so pronounced as in other affections simulating this disease. In atypical cases, or in instances where the surgeon sees the case for but a few hours, the diagnosis may be quite confusing. In Dr. Richardson's case the patient was many miles from a competent surgeon and could not be properly watched. Perhaps another reason for operating was the fact that Dr. Richardson was fully alive to the possibility of the patient's becoming suddenly worse. At the examination under ether he felt confident that he detected muscular rigidity and the presence of a tumor. The enlarged glands found at the operation showed changes due to the typhoid bacillus.

Pedicle Torsion.—When an ovarian tumor becomes turned upon its axis and the pedicle twisted the patient complains of abdominal pain of increasing severity, inguinal tenderness, nausea and vomiting. Examination will show the presence of fever, muscular rigidity, shock, and a tense, painful, rapidly developing tumor. The history may reveal the fact that a tumor was noticed weeks, months or even years before the present attack. In Dr. Roth's case the patient complained of severe, persistent pain in the right iliac region, exquisite tenderness at McBurney's point, and a bloody vaginal discharge. When the abdomen was opened a strangulated ovarian cyst was found. A similar case has been recorded by Brewer and others.

Perforated Ulcer.—When a gastric or duodenal ulcer perforates it causes clinical manifestations closely simulating those of a perforated appendix. Mr. Moynihan has called attention to the fact that the escaped bowel or stomach contents find their way, owing to a hillock in the transverse mesicolon under the pyloric end of the stomach, to the outer side of the ascending colon, and thence pass downward into the right iliac fossa, where the resulting peritonitis frequently leads to the diagnosis of appendicitis. By careful questioning a previous gastric trouble will be elicited. The meteorism that follows a gastric or duodenal perforation is of quite rapid development. Mr. Moynihan and others have frequently operated upon patients in which the wrong diagnosis of appendicitis had been made. Dr. Spellissy has found 43 cases of perforated gastric and duodenal ulcers that have been wrongly diagnosticated as cases of appendicitis.

Gall Bladder Lesions.—Acute cholecystitis has been frequently mistaken for appendicitis. If the tumor can be closely outlined, and noted to move up and down during respiration, and if there be a history of previous attacks in which the pain resembled that of hepatic colic, the diagnosis should not be difficult. Dr. Spellissy has collected 30 cases in which a wrong diagnosis was made. In Dr. Brewer's case, the patient, a lady of 33, had suffered previous attacks in which the pain was localized in the right iliac fossa; there was great tenderness at McBurney's point, muscular rigidity, temperature 99.8 degrees, pulse 100, persistent vomiting, and chilly sensations.

Pyosalpinx.—Even simple salpingitis has been diagnosticated as appendicitis, hence we need not be surprised that pyosalpinx has been mistaken for that disease. Dr. Roth's case, a woman of 24, was the mother of two children, and had aborted six days previously. She complained of sudden abdominal pain and vomiting. The pain localized in the right iliac fossa. Just above Poupart's ligament there was extreme tenderness, together with muscular rigidity of the right rectus. Constipation and a vaginal discharge were present, the latter being without odor. By palpation a tumor was detected to the right of the uterus, which was tender on palpation. The pulse was 100, temperature 104. Celiotomy revealed pyosalpinx. In Barker's case the pus tube, which had ruptured, was diagnosticated as appendicitis. In one of Brewer's cases celiotomy showed a translucent cyst of the Fallopian tube.

Renal Calculus.—When a stone becomes impacted in the kidney pelvis or in the ureter, it causes symptoms that have frequently been considered due to an infected appendix. The simple passage of a stone from kidney to bladder may cause similar symptoms. It may cause pain referred to right iliac region, tenderness at McBurney's point, vomiting, and muscular rigidity. The presence of pus in the urine; history of hematuria; tenderness on palpation along the course of the ureter; pain in the testicles and down the thigh; and the history of the previous condition usually makes a diagnosis

fairly easy. In Dr. Roth's case, the patient, a girl of 13, gave a history of previous attacks, the pain in which was not excruciating, was referred to the umbilicus, and later became somewhat located in the right side; there was a palpable mass in the right inguinal region, fever, rapid pulse, and tenderness just above McBurney's point. Celiotomy revealed a hydronephrosis, the exact cause of which could not be determined. In one of Dr. Brewer's cases there was a history of frequent attacks of severe pain in right side. The appendix was removed but the symptoms continued. The kindey was then anchored without benefit. During the last attack there was moderate fever, pain, pus and casts in the urine, little or no muscular rigidity, nausea and vomiting. The kidney was exposed, palpated, but no stone felt. It was then incised and a stone found.

Intussusception.—In children intussusception is not of frequent occurrence, but the clinical manifestations induced are usually quite clear and the diagnosis fairly easy —the bloody, mucous stools, the tenesmus, the palpable, rapidly developed movable mass, and the history of the case, being quite characteristic. In one of Dr. Roth's cases, the patient, a man of 40 years, complained of pain in the right inguinal region, which increased in severity, vomiting and constipation. However, his bowels moved forty hours after the onset of the attack. Palpation revealed a large mass in the appendical region, muscular rigidity and tenderness. Celiotomy revealed an ileocolic intussusception. To my mind the character of the pain, the sudden appearance of the mass, the absence of fever, would point to the character of the lesion.

Extra Uterine Pregnancy.—When the clinical manifestations of tubal rupture are of moderate severity and a careful history and rectal examination are neglected, the surgeon will be mislead unless hemorrhage be detected. I can not too forcibly impress the fact that when a married woman of the child bearing period complains of sudden abdominal pain, and there is the least confirmatory signs of pregnancy, and if the painstaking examination leads the surgeon to determine that hemorrhage is present, the probability of extra-uterine pregnancy should be carefully considered.

Intestinal Obstruction.—Dr. Spellissy has collected 18 cases in which the obstruction was due to Meckel's diverticulum. A number of other conditions causing obstruction have been mistaken for appendicitis. In the case of Dr. Mumford, the obstruction which was mistaken for this condition was due to a compact mass of orange pulp in the caecum.

Floating Kidney.—The fact that the right kidney may find its way into the right iliac fossa must be borne in mind. A palpable mass in this region, associated with colicky pains in the loins, umbilicus and appendiceal region; rigidity of the right rectus; tenderness at McBurney's point, vomiting and fever, forms a picture simulating that due to an inflamed appendix. A careful urinalysis, and a history of previous attacks, together with a careful study of all the symptoms will generally suffice to put us on the right track.

The following conditions have been mistaken for appendicitis: Undescended testicle (Cumston); hematoma of the broad ligament (Barker); hernia that had been reduced en masse (Barker); and torsion of the entire great omentum (Scudder). Gustaf Noerstrom states that he has seen myositis mistaken for appendicitis in a number of instances. He relates one in which he states that an error might easily have been made had the consulting physician been less on his guard.

Before closing this subject I desire to report a case of more than usual interest which occurred in my own work. The patient, Miss L., aet. 27, was kindly referred to me by Dr. R. C. Atkinson. He, on February 24th, 1905, considered the case one of appendicitis, and after a careful examination I concurred in the diagnosis. I saw the patient on the fourth day—she had steadily increasing temperature, and pain in the right iliac fossa from the beginning of the attack. When I saw her the pulse was 106, temperature 102 F. The pain was continuous, particularly marked at McBurney's point. At this site percussion gave a large area of dullness and a well marked circumscribed induration. The operation revealed a retro-peritoneal cyst, filled with dark bloody fluid, which at first I took to be papillomatous in character. The inner layer of the cyst was quite red, due I supposed to inflammation, which accounted for the intense pain. On account of the patient's already enfeebled condition, and the extensive attachment of the cyst (attached to rectum, right side of uterus, and to posterior peritoneum as high up as the region of the kidney), I concluded it best to empty and pack it, sewing it to surgical wound. The patient, after doing well for two days, became wildly delirious for several days, after which consciousness returned. She had fever more or less for a month, (at times quite high), for which we could not account, as frequent examinations failed to reveal any evidence of a septic focus. She is now well.

BIBLIOGRAPHY.

Janeway. Medical Record, May 26, 1900.

Richardson. Boston M. & S. Journal.

Roth. Medical Record, Oct. 29, 1904.

Brewer. Annals of Surgery, Vol. 33, 1901.

Moynihan. Lancet, Vol. 1, 1901.

Spellissy. Annals of Surgery, Vol. 35, 1901.

Barker. British Med. Journal, Vol. 1, 1903.

Mumford. Quoted by Spellissy.

Cumston. Amer. Jour. Med. Science, p. 124, 1902.

Scudder. Annals of Surgery, Dec., 1904.

Noerstrom. Med. Record, Mch., 1905.

DISCUSSION.

Dr. J. A. Larrabee, Barnard: I had a case in which I think I was mistaken. We had the usual symptoms of appendicitis, with intense pain in the region of McBurney's point and had to give two hypodermics of morphine to give relief. I put him on the starvation treatment and in two or three days he developed a case of cholecystitis. I have had patients with pain in the stomach, or liver develop appendicitis but I never before met a case with such pronounced symptoms of

appendicitis that proved to be a cholecystitis. The rigidity of the right rectus has never been a reliable symptom to my mind.

Dr. Herman F. Pearse, Kansas City: If those of us who operate upon the abdomen would attempt to report all of the cases in which there were some symptoms of appendicitis and yet there was no such condition present, we would take longer than this association is to be in session. One symptom that has been of much benefit to me in the diagnosis of appendicitis is the muscular rigidity. Hilton says in his book entitled "Rest and Pain" that whenever a nerve sends sensory filiments to a joint it sends motor filiments to all muscles that are concerned in moving that joint. The abdomen is like a huge joint with its serous surfaces gliding one upon the other, and when one portion of the abdominal peritoneum becomes inflamed the muscles over it and about it become rigid. The last speaker will not find rigidity of the right rectus muscle unless the peritoneum in the neighborhood is acutely inflamed. If, as in a case that came under my observation, the appendix has been carried over to the left side, the head of the colon forming the right wall of the inflamed area, the sigmoid flexure the left wall. The bladder and rectal muscles will be rigid and the rigidity will be in the transverse fibers of the abdominal muscles on the left side. If we will apply Hilton's law and apply it carefully it will help us very much in the diagnosis of appendicitis. There are many difficulties of diagnosis. Palpation through the rectum in the male, through the vagina in the female will aid in the diagnosis.

Dr. J. M. Allen, Liberty: Thirty-six years ago a writer announced his belief that there should be more operations in typhoid fever. The diagnosis of typhoid is easy and the principle ought to be that in every case of perforation in typhoid fever laparotomy should be performed at once. Many lives would thus be saved.

Dr. St. Elmo Sanders, Kansas City: The essayist has omitted to mention those cases where we occasionally have a diarrhoea with the symptoms of appendicitis. I saw one case where there was a violent diarrhoea and it confused me. I have seen several cases reported in each of which there was an abnormally long appendix. We may have an inflammation in the tip of the appendix and that does not involve the caecum. When the caecum is not involved we may have a diarrhoea, otherwise there is a constipation.

UTERO-VAGINAL FIXATION FOR THE RELIEF OF EXTENSIVE UTERINE PROLAPSE AT OR NEAR THE MENOPAUSE.*

By Fred J. Taussig, M. D., St. Louis.

The above title may seem somewhat compendious but, even as it is, it does not fully describe the particular class of prolapse cases I wish here to consider.

Let me emphasize at the start that I do not include those cases in which there is only a moderate degree of prolapse of the vaginal walls with descensus of the uterus. For them, if a pessary fails, a simple plastic, associated at times with Alexander's operation, will as a rule be sufficient. I include only such patients in whom when standing erect, the uterus partly or wholly protrudes from the vaginal orifice and in whom there is associated more or less complete eversion of the vaginal mucosa. Furthermore, I think we must in our operative procedures sharply differentiate those cases in which the possibility of a future pregnancy must be considered from cases beyond the menopause. Under forty years of age we have not the right, unless under exceptional circumstances, to so modify anatomic relations in the pelvis by our operations for prolapse that a resulting pregnancy would be attended with great danger to the mother and child. Any firm fixation of the fundus interfering with the growth of the uterus would hence be unjustifiable. We must usually be content with simple plastics even if later on there is a recurrence and the operation has to be repeated. If the woman be *over* forty years but before the menopause, the decision as to future pregnancies may be left to her. If she is still anxious to have a child, we can not do any radical operation. An operation such as the utero-vaginal plastic of Freund-Wertheim should only be done upon women beyond the menopause or on such women over forty as do not desire another child and on whom a sterilizing operation such as resection of the tubes associated with the plastic is permissible to avoid a possibility of conception.

After this rather extended definition I wish to emphasize that in this group of cases a very considerable percentage of all prolapses is comprehended, so great in fact that they present the majority of women who come to us for operative relief. Doederlein, for instance, found that 75 per cent of his cases of total prolapse occurred in women over 40 years old.

Utero-vaginal plastic, first proposed by Freund in 1896, and modified by Fritsch, Wertheim and Schauta, was devised especially for this class of cases and to avoid the

*Read before the St. Louis Obstetrical and Gynecological Society, December 14, 1905.

frequency of recurrence which had previously attended other operative measures. Thus far it has met with but little favor in this country, chiefly I believe, because its principles have never been correctly understood. I have therefore felt it my duty to give a somewhat detailed account of the method before I took up for consideration its advantages and disadvantages over other methods of procedure.

With the patient in the lithotomy position, the cervix is grasped with vulsella and pulled out as far as possible and downward over the perineum. The cystocele is thus exposed and a large oval area denuded on the anterior vaginal wall extending from one to two cms. below the meatus urinarius to the cervix. The extent of denudation required will depend on the relaxation in the individual case. The bladder is now separated from the cervix, care being taken to start sufficiently near the external os, since it occasionally happens that the intravaginal portion of the cervix is very short. The bladder must also be freed laterally to some extent, so that it can readily be pushed aside in the later stages of the operation. If the cervix be hypertrophic or greatly elongated, an amputation as high as necessary should now be done. The anterior peritoneal fold is then caught with forceps and opened, and the fundus uteri pulled out through the opening into the vagina. In women who are not yet in the menopause a resection of the interstitial and isthmic portion of the tube should be done to prevent conception. Next, the vesical peritoneum is sutured to the posterior surface of the uterus at a point near the insertion of the sacrouterine ligaments, thus shutting off the peritoneal cavity. If possible the ovaries should be allowed to remain within the abdomen. The uterus is now pressed against the denuded area anteriorly, while the edge of the vaginal mucosa near the urethra is drawn over the insertion of the tubes and sutured to the anterior surface of the uterus on the same side. A similar suture is taken on the other side. Then the rest of the uterus is covered with vaginal mucosa except for an area on the anterior wall the shape of a narrow isosceles triangle with its base to the urethra. The operation is concluded by an extensive perineo-plastic.

I should like here to insert a brief report of two patients on whom I recently performed such a utero-vaginal plastic with good result.

Mrs. A. B., aged 54, married, came into my charge Feb. 14, 1905. She had had six children, having had a laceration with the first one thirty years ago. This laceration did not apparently give rise to any symptoms. Five years ago, at the age of forty-nine therefore, the menopause was established.

For the past two years she had observed a protrusion from the vaginal orifice that had been growing progressively larger. Until June, 1904, the protrusion did not cause her much inconvenience but in the succeeding months she walked a good deal at the World's Fair and the prolapse became considerably larger. There were severe urinary symptoms (increased frequency, difficulty and pain) and a decubitus formed. In September she went to

a physician who inserted a pessary. This gave her temporary relief and permitted the decubitus to heal. After a time the pessary could no longer be retained, hence she sought operative relief.

On examination I found the external tear extending to the sphincter with resulting cystocele and rectocele. In the erect posture there was a complete prolapse of uterus and vagina. No evidence of any ulceration. Uterus small, atrophic, freely movable. No discharge.

On February 16th, a typical Wertheim prolapse operation was performed. The uterine body being rather small, did not serve as an ideal support for the cystocele hence the plastic anteriorly was made very extensive. A perineorrhaphy was done posteriorly.

Patient made a good recovery and left the hospital March 8. Urinated spontaneously on the fifth day. Slight suppuration along one perineorrhaphy stitch.

On November 25th, 1905, (eight and one-half months after operation) patient was in excellent condition, able to do all work, even the severest, without any of her former complaints. On examination very slight protrusion of vaginal walls on bearing down as hard as possible.

The second case of prolapse was operated on by me at the Washington University Hospital this fall in the absence of H. S. Crossen, chief of the gynecological clinic, and I wish to thank him for permission to include its report in this paper.

Mrs. K. V., aged 51, came to the gynecological clinic September 6, 1905. She had had fourteen children in the thirty-five years of her married life and no miscarriages. The menopause began eight years ago. Previous to that time her menstruation had been regular. The patient dates back her present trouble to about a year ago when she began to notice that her womb would come out whenever she did any washing or stood on her feet a great deal. Previous to this she had had backache and some dragging in the pelvis but thought that every woman was bound to have that. There had lately been considerable pain in the lower abdomen. For the past two months the discharge had been profuse and there had been some soreness. There were occasional cramps in the legs. Urinary symptoms had lately been very annoying. They consisted of increased frequency, burning, and difficulty in urination as long as the prolapse was down. The bowels were usually costive.

On examination I found a total prolapse of the uterus with complete inversion of the vagina. A decubitus ulcer was situated on the posterior cervical lip. The fundus appeared to be enlarged, was freely movable and not sensitive. The ulcer was treated a few times with 10 per cent. copper sulphate until healed. On September 14th the patient entered the hospital and on September 18th a Freund-Wertheim plastic was done.

The only unusual feature in the operation was the difficulty experienced in reaching the anterior vesical peritoneum. This was due to the elongation of the cervix which in this case was four inches long. The body of the uterus was only half an inch long. About one inch

of the cervix was amputated.

A very extensive perineo-plastic concluded the operation. The patient made a good recovery, the only abnormality being an inability to void urine. She had to be catheterized for eight days and during that time boric acid irrigations of one pint each were given after each catheterization. The patient also received helmitol 15 grains three times a day from the fourth day on. The urine remained clear but contained a trace of albumen and a few hyaline casts, a condition already noted before operation. Patient left the hospital on the twentieth day after operation. At this time the anterior surface of the uterus was entirely covered with epithelium with the exception of a strip about one cm. wide and 4 cm. long. A very slight agglutination between this raw surface and the posterior perineorrhaphy wound had to be freed. The peritoneum had healed by first intention. On Dec. 1, 1905, about two and a half months after the operation the patient was again examined. Subjectively, she was feeling perfectly well and able to do all her house work. The uterus was found healed in the anterior vaginal wound. A few red granulations were still to be seen near the cervix. This was due in great part to the patient's failure to come for after-treatment. The perineum was strong and unyielding. Even the most severe downward pressure did not cause any protrusion of the vaginal wall. There were no further bladder symptoms.

There have been several important modifications to the utero-vaginal plastic of Wertheim. The original suggestion of W. A. Freund was merely to invert the uterus through a posterior celiotomy incision into the vagina and, fixing it there, use it, so to speak, as the obturator of the prolapse. There are several serious objections to this operation. In the first place the fixation without denudation is not very firm. Secondly the exposed peritoneal surface gives rise to an irritating discharge. There is frequently formed a granuloma over the raw exposed surface. Furthermore there is no possibility of intercourse and lastly the uterus is sometimes too large and sometimes too small to act as a proper obturator for the vagina.

Fritsch's modification in 1900 corrected only the first of these points by denuding the anterior and posterior vaginal walls before fixation. In both his and Freund's operation an opening had to be made in the fundus to permit the outflow of the uterine secretions.

It was Wertheim who first put the operation on a more practical basis. In his opinion the uterus should not be used as an obturator but as a stopper for the cystocele. Hence he inverted the uterus through an anterior celiotomy incision. He also considered it of importance that the vagina be not obliterated so as to prevent intercourse. At first he merely fastened the posterior surface of the uterus to the denuded anterior wall. Later he found it more advantageous to cover the sides and a portion of the vaginal wall as well so as to diminish the quantity of exposed uterine surface. Bucura has demonstrated how rapidly the exposed area is covered with vaginal epithelium.

Schauta's modification is only one step further in the same direction. He covers the uterus entirely with vaginal mucosa. The observations of Fuchs recently published make me doubt whether this is to be really considered as an advance. The latter occasionally finds after this operation that the uterus has again assumed an erect position, thus giving the bladder a chance to descend. By leaving a small exposed area to granulate over, the fixation of the uterus beneath the bladder becomes more firm and the aforementioned condition can hardly occur.

Finally there has just been published in the *Centralblatt fuer Gynaekologie* (Oct. 28, 1905.) an interesting modification of this operation by Th. Landau. Landau amputates a portion of the fundus and uses the remaining piece together with the cervix in the same way that Wertheim and Schauta do. The advantage, he claims, lies primarily in putting the sacro-uterine ligaments on a stretch. I can see the advantage of Landau's method in cases where the fundus is unusually large. As a rule, however, the increase in size in the uterus in cases of prolapse is centered in the cervix. Landau's object could be attained better in these cases by amputating the cervix just as had been done right along by Wertheim and other operators, wherever deemed necessary.

From the reports of Klein, Bucura, Schauta, Kroenig, Fuchs and Doederlein I have been able to put together 134 cases from which the frequency of a recurrence could be determined. In only five of these 134 cases was there a return of the prolapse. All of them had been under observation for over eight months, and the majority for several years. In the five cases in which there was a recurrence of the prolapse, the reason lay in an insufficient perineo-plastic. The fundus remains in position and the cervix owing to the absence of proper support describes the arc of a circle about the symphysis as a fixed point and appears at the vaginal orifice. These recurrences, it seems to me, show that the action of the uterus in these cases is neither as obturator nor stopper but rather as a sort of pessary of cylindrical shape whose anterior end is fixed to the pubic arch and whose posterior end (the cervix) is supported by the perineal body. In thirteen other cases there was noted objectively a very slight protrusion of the vaginal walls, but this gave rise to absolutely no symptoms. This would make the percentage of cures 96.5 per cent. subjectively, 87 per cent. objectively. These figures compare most favorably with the results obtained in the two main methods that concur with it in the treatment of these prolapses: (1.) ventro-fixation and colpoplastic and (2) vaginal extirpation of the uterus.

The results with ventro-fixation and plastic according to Christiani in this form of prolapse were in 83 cases, 73 per cent. absolute cure and 87 per cent. ability to work. The results of Bumm in 105 patients whose prolapses had been corrected by vaginal hysterectomy, showed 75 per cent. absolute cures. While I am aware of the extreme difficulty in justly comparing the results of any operative methods without more de-

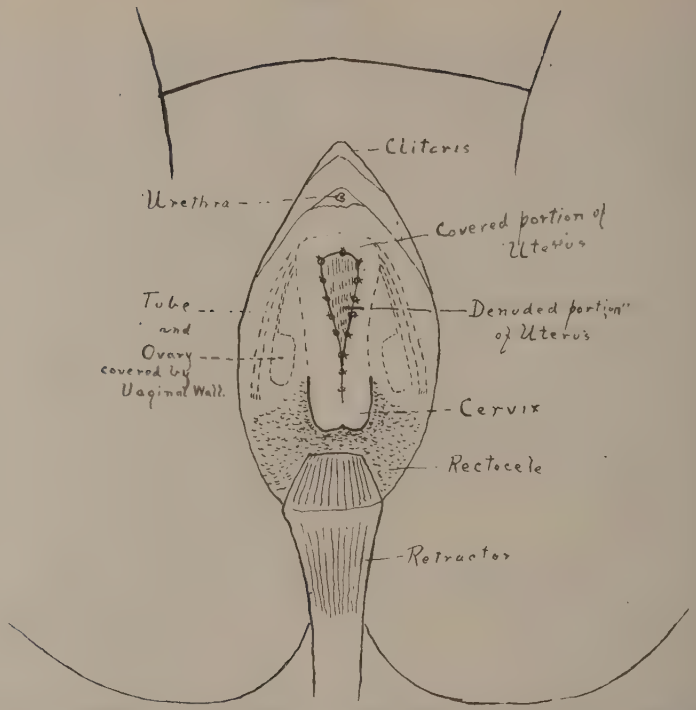


Figure 1. Wertheim's operation for total prolapse of the uterus This shows the anatomical relations after the uterus had been pulled through the opening in the peritoneum of the vesico-uterine pouch and fastened between bladder and anterior vaginal wall. The vaginal denudation is made so extensive that a portion of the anterior wall of the uterus remains denuded. The cervix projects free into the vagina. Tube and ovary are partly intra-peritoneal, partly lying in the vesico-vaginal septum.

tailed information as to the nature of the cases and the manner of the post-operative examination. I think these figures make it appear that the permanent results of utero-vaginal plastic justify the belief in its efficacy inspired by a consideration governing the formation of prolapse.

Let us first consider the defects of the other two methods already referred to.

Ventro-fixation, as Pfannenstiel and Schauta emphasized brings the uterus nearer the abdominal wall. To a certain extent this prevents the bladder, when full, from rising up out of the pelvis. It thus literally compels the bladder to put its dilating force upon the already weakened anterior vaginal wall and the consequence must in a certain percentage of cases be a return of the cystocele that is most to be feared, as this is the weakest point in the pelvic floor and the cystocele is most liable to give rise to disturbing symptoms.

Another objection to the ventro-fixation operation is the fact that not infrequently it is the greatly elongated cervix that protrudes from the vaginal outlet while the fundus may remain at approximately the normal position. In my second case, for instance, I believe

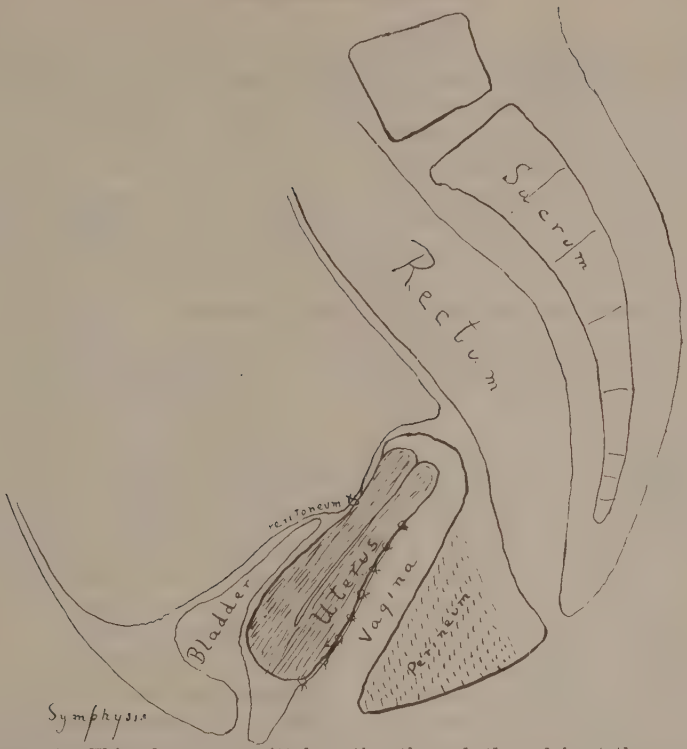


Figure 2. This shows a sagittal section through the pelvis at the conclusion of the operation. The uterus lies in strongly anteverted position in the vesico-vaginal septum. The point will be noted where the vesical peritoneum is sutured in the peritoneum of the posterior uterine wall. A very extensive perineo-plastic is the last step in the operation.

a ventro-fixation could not have had any appreciable effect on the prolapse. Of course, we might as has been suggested by some, amputate the uterus and fasten the cervix to the abdominal wall but this would be bound to increase the primary mortality by prolonging the abdominal operation and would not correct the cystocele as already pointed out.

Finally do not let us forget that ventro-fixation with vaginal plastic exposes the intestines, necessitates a new and unnecessary wound in the abdominal wall, requires a change in the position of the patient with attendant loss of time and in a certain percentage of cases results in post-operative hernia. I hear a great deal of pooh-poohing about post-operative hernia and doubtless it is much rarer than heretofore but it does occur, and I refuse to put an iota of reliance in the broad statements regarding this matter made by surgeons who do not carefully follow up their cases for a number of years.

Vaginal hysterectomy with attendant plastic probably has been, and still is, the favorite operation for complete prolapse. Its advantages are evident. Its disadvantages have been gradually shown by the experiences of various operators. I

can not here go into a consideration of the many methods devised for a restoration of the pelvic floor after the removal of the uterus. The fact remains that when we take away the uterus, we take away the keystone of the arch even if at the time of operation the arch might, figuratively speaking, be said to be broken. Without it a restoration is most difficult to accomplish and thus we have not so rarely a return of the prolapse in which often lie coils of intestines.

But there are other objections to this operation. In women over forty but not yet in the menopause it means a sudden cessation of the menses with its attendant symptoms on the part of the nervous system. Any hysterectomy, furthermore, even if vaginal, is attendant with more risk to the life of the patient than a simpler plastic. Doederlein reported three deaths in 63 operations,* whereas in all the reports on utero-vaginal plastic amounting to over 200 operations I found record of only a single post-operative death.

There is finally to be considered the fact that after removal of the uterus the vaginal tube atrophies even more rapidly than otherwise and coitus soon becomes impossible.

From the aforegone it will be seen that utero-vaginal plastic, according to Freund-Wertheim, for extensive prolapse at or near the menopause is an operation that involves no change of position in the patient during operation, makes but a single wound, does not expose the contents of the abdomen, does not necessitate the removal of any organ, does not interfere with sexual intercourse and finally, by the position of the uterus, effectively prevents that most feared after-result, return of the cystocele. The evidence already at hand, 134 cases with but five failures, conclusively demonstrates its efficacy. I hope there will in the coming years be a diminution of the opposition that has thus far interfered with its more general acceptance by American surgeons and gynecologists in the particular class of cases under consideration.

BIBLIOGRAPHY.

Baatz. Dauerresultate der Prolaps und Retroflexions-Operationen. Monats. f. G. u. G., 1904.

Bucura. Demonstration eines Praeparates. Zeitschr. f. G. u. G., vol. XLVII, part 2.

Bucura. Plastische Verwendung des in die Scheide gestuertzte Uterus-Koerpers bei Prolapsen. Zeitschr. f. G. u. G., vol. XLV, part 3.

Bumm. Ueber die Erfolge der Radical-Operation beim Uterusprolaps. Gyn. Congress Wuerzburg, Cntrbl. f. Gyn., 1903, No. 27.

Doederlein-Kroenig. Operative Gynaekologie. Leipzig, 1905, p. 263.

Foges. Erfolge der Septumnaht bei Prolaps-operationen. Monats. f. G. u. G. 1904.

Freund, W. A. Diskussion Naturforscherversammlung Frankfort. Cntrbl., f. Gyn. 1896, No. 40.

Freund, H. W. Ueber moderne Prolapsoperationen. Cntrbl. f. Gyn., 1901, p. 441.

Fritsch. Prolaps Operation. Cntrbl. f. Gyn., 1900, No. 2.

*Raubut had a mortality of 8 per cent. in 137 vaginal hysterectomies; 5.4 per cent mortality in 55 ventrofixations.

Hager. Diss. Tuebingen. Cntrbl. f. Gyn., 1901, p. 239.

Klien. Prolapsoperationen. Hegar's Beitraege, vol. VIII, part 1.

Kroenig. in Doederlein-Kroenig Operative Gynaekologie, 1905.

Landau. Th. Ein neues Operations-verfahren zur Heilung des Totalprolapses bei Klimakterischen Frauen. Cntrbl. f. Gyn., 1905, No. 43.

Lehmann. Diskussionsbemerkungen. Zeitschr. f. G. u. G. vol XLIII, 1900.

Mandelstamm. Operative Behandlung des Genital-Prolapses. Monatschr. f. G. u. G. vol. XIV, part 3.

Martin. Referat ueber Prolapsoperationen. Gyn. Congress Wuerzburg, Cntrbl. f. Gyn., 1903, No. 27.

Middeldorpf. Beitrag zur Statistik der Prolaps-operationen. Cntrbl. f. Gyn., 1903, p. 88.

Payeur. Ueber die plastische Verwendung des Uterus bei Schweren Totalprolapsen alter Frauen. Diss. Strassburg, 1896.

Pfannestiel. Diskussion Gyn. Congress Wuerzburg. Cntrbl. f. Gyn., 1903, No. 27.

Schauta. Die Operation schwerer Formen von Gebaermutter-scheidenvorfall Festschrift fuer. Chrobak, Wien, 1903.

Wertheim. Zur plastischen Verwendung des Uterus bei Prolapsen. Cntrbl. f. Gyn., 1899, No. 14.

Winter. Ursachen und Behandlung der Prolapsen. Graef'sche Sammlung Halle, 1904.

DISCUSSION.

Dr. Walter B. Dorsett said that five failures out of 134 cases certainly spoke in favor of the operation but looking at the plates he felt that two points might be criticised. In a prolapse there was first the elongation of the peritoneum over the prevesicular space, in other words, the peritoneum was stripped off the anterior abdominal wall over on to the bladder. There was also absence of perineal support, an elongation of the round ligaments, of the utero-sacral ligaments and the attenuated condition of the broad ligaments,—all causes of prolapse. This operation did not contemplate repair of the part of the peritoneum going over the top of the bladder. He suspected that the return was due to the bladder coming down first, not being supported from above, and carrying the uterus down with it. He objected, too, to the position in which the uterus was left after this operation. The neck of the uterus was upward and the fundus down, thus interfering with the natural drainage of the uterus. In regard to ventrofixation, to do such an operation without a perineoplasty was perfectly useless. The chances of infection in an abdominal section were less than the risk run in doing the operation through the vagina. With the patient in the Trendelenburg posture the intestines could be pushed back and protected by gauze. There could not be any danger of injuring the intestines. It should not take more than twenty-five minutes to do a ventro-fixation from the time the abdomen was opened until it was closed again. The operation as practiced by Marcey was the one Dr. Dorsett preferred. This was about as perfect an operation as one could wish. He believed that an operation should be done right, but he did believe that it was possible to do

this work in a much shorter time than was possible by Dr. Taussig's method. In regard to the bladder not being completely dilated after a ventro-fixation, Dr. Dorsett had never known that to occur after any operation that he had done, and he had kept track of his patients. He did not do this operation as Kelly did it, however. There was no excuse for inverting the uterus and sewing the posterior uterine wall to the anterior abdominal wall. One had here elongations of strips of peritoneum for the entanglement of the intestines. When one fixed the anterior wall low down on the uterus there was not this trouble. Four of his patients had been confined after this operation without trouble. When the operation was done as indicated by Kelly there was likely to be trouble, so it was hardly fair, in the consideration of ventro-fixation, to regard it as the operation described by Kelly.

Dr. Frank Glasgow had never done this operation and did not think that he ever would. It appeared to him that it did not follow the path that the operator should lay down for himself. There were many of these cases in old women where, if one kept the uterus in position for a little while, there would be little trouble after that, the uterus diminishing in size remarkably. He did not operate on any case in an old woman where he could make her perfectly comfortable without it, and in almost every case, unless very extreme, it could be done by repairing the perineum and later inserting a pessary. Lately he had one case, a woman well up in the fifties, who had very little perineum, but the levator ani was distinctly felt on either side. He had used a small, soft ring in this case, and the woman was perfectly comfortable. As to the operation, he did not believe that any organ should be put into an impossible position, but that it should be put into the position nature intended as nearly as possible. He had done ventro-fixation several times and he agreed with Dr. Dorsett as to the Kelly method. A band across the abdomen is a dangerous thing. His own method of fastening the anterior wall of the fundus to the abdominal wall was to fill the bladder with fluid and pass the ligature through the fascia of the abdomen, then downwards beneath the peritoneum covering the bladder, beneath that covering the anterior surface of the uterus to point of insertion into the anterior wall of the uterus, and back the same route. When he tied the ligature it formed a fold extending up from below like nature's abdominal ligaments. But abdominal fixation was not the ideal method. There were other operations than this and vaginal hysterectomy, and some of these Dr. Glasgow thought were a step in the right direction. In one of these the posterior and lateral vaginal walls were dissected off and the tissue on either side brought together behind the vagina. He had done this operation and he had also dissected up the vagina from the rectum, in one case up as high as the cervix, raising the whole vagina off from the rectum and then separating it from either side. He had done this less extensively for years, raising the vagina upward and not cutting away a particle of tissue,

and then bringing the tissue across, forming a broad septum between the vagina and rectum. With the vagina in that position the two folds of tissue should then be sewed together from underneath, or through and through sutures might be used, forming a column. This acted as did a pessary, holding up the cystocele. This portion of the vagina brought forward and folded would atrophy somewhat, stay in place and act as a pessary. But the principal thing was the attachment of the ligamentous tissue on either side. One should go down past where the levator ani came through and then down and include the perineum. This was the only operation that the speaker had done for repair of the perineum for fifteen years. A Chicago man had suggested making a slit in the anterior wall, extending his sutures on either side to include the base of the broad ligaments and bringing the stitches together in front of the cervix, thus throwing the cervix backward. This was a rational procedure, and ought to give good results in old women, where the weight of the uterus was not great. As to ventrofixation, Dr. Glasgow mentioned a case showing how little support was given by scar tissue. There was the removal of a fibroid and then fixation in the abdominal wall. It fixed very nicely but the cervix had now gotten perfectly free from the scar tissue and the patient had a hernia, yet it was a firm scar-tissue fixation. One element must be taken into consideration in connection with this operation. An American woman with a third degree of retroversion would probably be in a state of melancholia. With the uterus put in the normal position this often all disappeared. The operation suggested by Dr. Taussig placed the uterus in such an abnormal position that the American patient would be worse so far as her mental state was concerned, than before the operation. Those phlegmatic women over there were not affected by anything less than dynamite, so that possibly this operation might prove more satisfactory with those patients. This operation, instead of trying to repair what harm had been done, tried to make something entirely new, and not much improvement on nature's work is possible.

Dr. Reder thought it was always well to pay a certain amount of respect to the organ to be dealt with as far as the position was concerned in those cases where the more radical operation was not resorted to. The operation described would not appeal to him when it was possible by other operative methods to keep the organ in an almost normal position. As to the inversion of the uterus that was the same method Freund used in the repair of very obstinate vesico-vaginal fistulæ. The speaker had performed this operation twice for vesico-vaginal fistula. In the first case he made an opening in the fundus of the uterus for drainage. In the second case no opening was made. The result was equally as good in the latter case. In the German hospital, New York, he had seen many satisfactory operations for prolapse and procidentia. Dr. Munde was a strong advocate of the pessary and his success was very gratifying. He did an an-

terior and posterior colporrhaphy and then introduced a pessary. It was Tweedy, of Dublin, who devised an operation in which he removes a large oval flap of mucous incumbrance from the anterior vaginal wall with a transverse incision across the cervix just below the bladder. The bladder is loosened from its uterine attachments and the abdomen opened between it and the uterus. Douglas' cul-de-sac is next opened in the usual manner. The upper and lower incisions are joined. He had called attention to the fact that the bases of the broad ligaments consist of strong fibers of dense connective tissue firmly attached to the supra-vaginal portion of the cervix. Having loosened and separated this portion these bands are brought together anteriorly with suture. Before tying the sutures he brings down the uterus and amputates the cervix. The fundus of the uterus is next secured to the anterior vaginal wall above the uterus, followed by antero- and postero-colporrhaphy. Dr. Reder had employed this operation in one case and said it was surprising how beautifully it turned out. There was no reason why mucous membrane should not be sacrificed if it could not be put to any use. In his perineorrhaphies he sacrificed, by denudation, sufficient mucosa to enable him to have a good view of the underlying tissues. He did not use catgut, but silk. Many failures in this operation were due not so much to imperfect technique but to the catgut sutures being absorbed too soon and allowing the tissues to part.

Dr. Crossen said that the marked distortion of the parts (both uterus and bladder) was what struck him most forcibly, and the question was whether the condition was serious enough to warrant this extensive disturbance of anatomical relations, and another question was would this marked distortion create trouble. The first question may be answered positively in the affirmative. Many of them would be very much pleased to get any operation no matter how extensive that would do the work satisfactorily in certain persistent cases. There were some cases in which there was a return, and this operation was on trial for the correction of these very severe cases. He was open to conviction and he was glad this operation had been brought up for discussion. But only by a comparison of results years after the use of all three operations would it be possible to know which was the preferable. As to the second question, that had not been fully decided and could not be until the operation had been longer on trial. It seemed to him the doctor had not given enough consideration to Landau's objection. Landau, in reporting his cases, mentioned two in which the prolapse returned. Dr. Crossen had understood Dr. Taussig to say that in the cases of relapse, the anterior portion of the uterus being fastened, the return was due to the defective perineal work, and the cervix fell downward. But in Landau's cases the prolapse was through the opening in the vaginal wall and, consequently, was of the anterior and not the posterior end of the uterus. Another point that Landau made was that in certain cases the symptoms

returned after some months practically as they were before, with the parts still in the position in which they had been placed at the time of the operation, and Landau stated that he regretted that he did not take out the uterus in those cases. It seemed that in the cases where there had been a return of the prolapse, and also where there had been a return of the symptoms without the return of the prolapse, the uterus was very large and he attributed the return of the symptoms to that fact, and because of that he had devised a modification of this operation. This was an amputation of the upper part of the uterus to reduce its weight. Landau had given much study to this operation and the fact that he had devised another and more extensive operation showed that there were serious drawbacks.

Dr. Glasgow thought that probably the reason of the return was that in sewing the uterus in this position there was but this one thing for its support. The bladder was no support. The only thing that held it was stitching of the uterus underneath that flap of the vagina on the other side of the urethra. The stitching extended into the tissue on either side. So far as he could see there was absolutely nothing else. The bladder didn't hold it up, the vagina did not hold it up and if these stitches did not go deep enough into the tissue, they would leave the uterus free to move either backward or downward.

Dr. Glasgow, referring to the effect of paresis on prolapse, said he had seen an extreme case, the uterus outside the body, in an infant ten days old. Dr. Dorsett had sent him a clipping reporting a similar case. Dr. Glasgow's case was one of spina bifida and there was complete paralysis of the pelvic muscles. There was no tonicity in any of the ligaments. This case simply proved that those ligaments held up the uterus because there was muscle in them. So, in doing this work, something like the levator ani should be used for its muscular support. This case demonstrated most beautifully the effect of taking away the power of the muscles.

Dr. Crossen asked the doctor to state how he had determined certainly that the cervix was four inches long and the body of the uterus but one-half inch long, as given in his paper.

Dr. Taussig, in closing, said that he had known that he would be unable to describe this operation completely. In the first place, the stitch did not merely fasten the vagina to the anterior wall of the uterus. After making the denudation there is left a considerable area of tissue extending almost to the pubic arch. In making the stitch some of this tissue lying deeper would inevitably be picked up, so that one had not merely the vaginal mucosa. After fastening this to the anterior uterine wall, the same thing was done on the other side. Each stitch was a fixation stitch. It was not merely these two stitches that held the uterus in place. Every stitch included the vaginal wall, and so there was really a row of fixation sutures on either side. As to the cause of the return of the prolapse in these five cases, it had been positively determined that the per-

ineorrhaphy was insufficient and there was a certain degree of rectocele in consequence. The fundus of the uterus was found in the position where it was fastened. In Landau's article things were stated too vaguely. He merely stated: "We have been in the habit of doing Wertheim's operation and have had two failures." We should be very careful in giving our experiences exactly. Nothing so adds to the value of a man's statement as a statement of the number of times that a thing has been done. In the two cases in which there was a return, there was a very large fundus and this fundus presented anteriorly and gave rise to the symptoms. These were the only cases that Dr. Taussig had been able to find where there had been a sinking of the fundus. There had been a sense of weight and the presence of a foreign body, but there was no return of the bladder symptoms. Dr. Taussig had included in those 134 cases only such reports as gave complete figures. He had to exclude for this reason Landau's. As far as the drainage of uterine discharge after utero-vaginal plastic was concerned, Dr. Dorsett and Dr. Brown seemed unduly afraid of its insufficiency. There was nothing pressing directly against the cervix, nothing that would keep back a cervical discharge or the normal menstrual flow. In retroversion the blood flowed out of the uterus even though that organ was not in exactly the normal position. As to absence of any contact with the intestine in ventro-suspension, one might put the gauze over the intestines as suggested but even so the intestines had been touched in the operation, and it was the irritation that was dangerous so far as shock was concerned. In ventrofixation it was a very small item, but it must be considered and the fact that the mortality had been rather higher than in the simple plastic operation made Dr. Taussig feel that there was in some way greater danger to the patient. As to the time required, he had seen the operation done in considerably less than an hour by Wertheim and his assistants. When one first began doing vaginal work it must be done more carefully, but it must be a shorter operation for the reason that all one had to do was to push the bladder aside and open the vaginal peritoneum. The only additional time consumed was in shoving the bladder off and opening the peritoneum. With the abdominal operation there was first the incision, then the operator must fix the uterus in the abdominal wall, then the abdominal wall must be closed and the patient placed in a different position. The expert could do this operation (Wertheim's) in less time than the expert could do a ventrofixation. In regard to the constriction of the bladder by the fundus in ventro-fixation, the speaker had not meant that by that operation the bladder was squeezed together but he did mean that after a ventrofixation when the bladder got fuller and fuller it could not rise upward but must press down and must press against the anterior vaginal wall and that thereby a fresh cystocele would be most apt to form. As to Dr. Glasgow's remarks relative to pessaries, Dr. Taussig did not wish to be un-

derstood as one who recommended operation in every case of prolapsus. He had very recently had occasion to use a supporter in a case of complete prolapse. He did not in this case do a Wertheim operation because the woman when first seen had a high fever and he had made a diagnosis of pyelitis. This woman was approximately seventy years of age, and in such a case he would not of course advise operation where relief could be obtained by the use of a pessary. The speaker had recently seen a case of congenital prolapse without a spina bifida. This did not always occur with spina bifida. If Dr. Glasgow's contention was that the spina bifida was the cause of the prolapse, he had much to prove. Dr. Taussig had not much faith in the idea of paresis.

The reason this operation had been devised was because other operations had been tried extensively and had been found to be failures in a larger percentage of cases than they had hoped would be the case. Twenty-five per cent of recurrences was not very satisfactory. The aim should be not to be content with an operation giving good results when there was another operation that gave better results. He would not have urged so strongly in favor of this operation but for the fact that within the past three of four years reports had been coming in of the permanence of cure in these cases. There was here an operation that brought about permanent cure in a large percentage of cases and it should be given a trial. While Dr. Taussig believed there were no surgeons in the world as great as those in America, and that more operative devices and methods had been discovered or proposed by American surgeons than by any others, yet the American surgeon should not think that no other nation could devise anything. When a thing was found to have a certain value, it should be given a trial. No country should be permitted to get ahead of this one. For this reason he was pleased with the views of Dr. Crossen in this matter. He had to confess that Dr. Crossen had him floored on the manner of his determining the length of the cervix and the uterus. He could only prove that statement by bisecting the uterus. He had merely surmised that the cervix was four inches long and the uterus one-half inch long from the history and the findings in the case, and he believed it was justified. The fundus of the uterus in a woman five or six years past the menopause and who had no metritis would atrophy. If, then, there should be a constant drag upon the cervix there would be an elongation of that due to the traction. The location of the uterine arteries and the point where the vesical peritoneum passed over to the uterus indicated generally the site of the internal os and so marked the cervix from the corpus.

SYMPOSIUM ON LOBAR PENUMONIA.*

SOME STATISTICS RELATIVE TO THE DISEASE AND ITS COMPLICATIONS.

By John Wilson, M. D., Kansas City, Mo.

To do justice to the part of the subject assigned me, the limited time given, and that divided by the current duties of other matters is entirely insufficient. I will however do the best I can under the circumstances, fully realizing the imperfect and incomplete presentation made in my paper I will as best I can give the death rate, influence of age, sex, occupation, distribution and complications. I take it that a few words in the way of comparative statistics, dating as far back as the literature of 1870, will not be out of the way. I must say they show considerable variance, even in the hands of good men—and not entirely complimentary to scientific advancement.

Loomis, writing of croupous pneumonia in 1855 says: "It is often stated that pneumonia is a far more frequent disease now than it was twenty years ago. That I might arrive at something definite on this point, I have carefully examined the death reports of England from 1840. Also those of New York City. The average mortality from pneumonia in England from 1840 to 1858 was 5.57 per cent. and from 1859 to 1877, 4.77 per cent., a decrease of 14.3 per cent. In New York City from 1840 to 1858 the average ratio of mortality from pneumonia to all other diseases was 5.85 per cent. And from 1859 to 1877 was 6.20 per cent. An increase in New York of 15.2 per cent. showing at that date pneumonia on the decrease in England, and on the increase in New York." Writing under same date 1885, he states: "The mortality rate of pneumonia is shown by the following statistics: in the hospitals of Stockholm 11 per cent. died, Vienna hospitals 24 per cent. died, Basle hospitals 23 per cent. died. In the U. S. Medical reports from May 1st, 1861 to July 1866, of 61,202 cases that occurred among the white troops in the Civil war a little over 24 per cent. died; of 16,133 colored troops nearly 33 per cent. died. Confederate hospital reports 33 1-3 per cent. died. The statistics of private reports range from 3 1-3 per cent. to 21 per cent." In some states, the mortality average from all reports to which he had access was 20.1 per cent. of deaths. Loomis further states in 1885 at the time he was writing, that the death rate from pneumonia was about the same as fifty years before.

The foregoing was during a

*Read at the meeting of Jackson County Medical Society, January 30, 1906.

period before the recognition and acceptance of the relations of the pneumococcus to pneumonia, before the profession had the avail of whatever advantage may accrue to such knowledge.

The per cent. of mortality in pneumonia as just given, dates back from 56 years to 11 years prior to 1896. The literature of '96, '97, and '98, as taken from the *American Journal Medical Science* for '97, gives the general death rate for pneumonia from 20 to 30 per cent.

Hare as late as 1905,states, "There can be no doubt that pneumonia is one of the most common and fatal of all acute infectious diseases, and that its frequency and mortality are increasing." All statistics that my limited time allows me access to, go to show that the average death rate or per cent. of mortality of pneumonia varies but little if at all since sixty years ago.

The opinion I find, as to its relative frequency is not one of unity. At the same time, however, I am inclined to believe that some progress is made in that direction, yet not as much as we could wish, in the light of the hygienic enlightenment and the application of the laws of sanitation of today I have been unable to procure any exact data or figures on this point.

The influence of age on the mortality of pneumonia is very great, so fatal is it in the old that some writer has termed it "the natural end of the Old Man." Statistics give the mortality above the age of 60 as high as from 50 to 80 per cent.

I am indebted to Dr. Scott P. Child for a copy of vital statistics of the state of Michigan for the year 1901—the only special literature in this line I could avail myself of. This report will give a fair idea of certain points to be considered at least of the States bearing a like relation to climatic conditions. A table of deaths from pneumonia taken from this report for 1901 gives the deaths in the state for that year, total 2,412.

DEATHS BY MONTHS.

January, 334; February, 397; March, 372; April, 311; May, 197; June, 121; July, 54; August, 39; September 68; October, 96; November, 155; December, 268.

DEATHS BY AGES.

Under 1 year, 486; under 5 years, 705; 5 to 9 years, 61; under 10 years, 766; 10 to 19 years, 138; 20 to 29 years, 166; 30 to 39 years, 183; 40 to 49 years, 207; 50 to 59 years, 225; 60 to 69 years, 272; 70 to 79 years, 293; 80 and over, 158; males, 1,352; females, 1,060; excess of males, 212.

These statistics from this report are in some particulars different or at variance with that of Hare who in his late work states that croupous pneumonia occurs with the greatest frequency between the ages of 40 and 50. The Michigan report, at an earlier and at a more advanced age.

Occupation as influencing pneumonia.—I find in uncomplicated pneumonia, that exposure to cold and the general, vicissitudes of weather conditions, coupled with a general lowering of vital resistance to infection usually due to financial inability to live under better conditions and surroundings, has

greater influence than occupation *per se.*

The proportion of single or double pneumonia.—Hare, in his late work states that 495 cases examined at autopsy, and collected by Fowler, Osler, Kerr and Steven in this country and England the disease was unilateral in 83 per cent. unilobar in the proportion of about 50 per cent. and affected the lower lobe in nearly 75 per cent.

Complications follow in about the order mentioned: pleurisy-pericarditis, endocarditis, meningitis, peripheral, neuritis, serious or grave gastric-complications, parotitis. Bright's disease. Relapse rare if at all. Recurrence more common than any other acute disease.

The distribution according to literature is general; where most prevalent is of more interest. On this good authority differs. Osler says, it prevails equally in cold and hot countries; on this continent is more prevalent in the southern than in the northern States. Hare, in his late work, says it is met with in all parts of the world, more common in the temperate than in the tropical zones. In the U. S. the census for 1900 shows that its greatest mortality is in the great north western states east of the Rocky mountains, The Michigan report, alluded to before, and which is perhaps a fair index from which to draw conclusions, gives in the State of Michigan more pneumonia cases occuring than any of the other respiratory or chest diseases—tuberculosis excepted—in the years of 1898, 1899, 1900 and 1901. The number of deaths in those years were, in '98, 1805; '99, 2192; 1900, 2035; and in 1901, 2412.

Of one thing however there is a general agreement, that the fatality is greater in the north western states east of the Rockies.

While recognizing the incomplete and in some measure the inaccuracy of the statistics given, I am however satisfied as to their general correctness as they occur in the literature of the subject, and are a fair indication of the status of pneumonia along the line intended to be covered in my paper, dating back 60 years and up to the present time. I must say but little progress seems to have been made, since the earlier days when pneumonia was considered a local inflammatory disease, and later years when its infectious nature has been ceded, and its specific cause is claimed to have been brought to light by bacteriologic investigation and microscopic findings. It must, however, not be argued that no advance has been made in any of the phases of this disease. Pessimism must not be permitted to assert itself for the light of a perfect day will yet reward the perseverance of the internalist aided "by biology bacteriology and microscopy."

ETIOLOGY AND MORBID HISTOLOGY.

By Franklin E. Murphy, M. D., Kansas City, Mo.

The greatest problems now engaging the attention of the medical profession are tuberculosis, pneumonia and carcinoma and of these it would appear that pneumonia in recent years, as a problem, is increasing in importance.

Nearly a century ago Laennec, to whom we owe so much for what we know of this disease stated. "This is one of the most serious and commonest diseases and in the frigid and temperate climates causes more deaths than any other acute disease." Thirty years ago Jurgenson said of it: "Next to phthisis it is one of the most dangerous enemies of man." Today pneumonia causes more deaths than tuberculosis.

Through our knowledge of the pathology of tuberculosis and the life history of the tubercle bacillus we have been enabled to reduce the mortality from consumption and the reduction happily goes on.

Surely in approaching this question of pneumonia we should have at hand all the available knowledge of the etiological factors operating and should follow as closely as possible the lung changes in the evolution of the disease.

Fibrinous, croupous, lobar or genuine pneumonia is an acute epidemic or sporadic febrile disease the determining anatomical character of which is exudative inflammation in which the hemorrhagic fibrinous exudate in the alveolae, infundibula and finest bronchioles, coagulates into a firm mass. So long as the exudate is firm, the lung, upon section, appears granular for the reason that the walls of the alveolæ and infundibula retract slightly causing the contents to present as granules.

The process usually involves one entire lobe or the greater part thereof (lobar pneumonia) and often the alteration is uniform throughout the affected area. All the lobes of one lung may be involved, indeed all the lobes of both lungs. Not infrequently there results from a pneumococcic infection, small, broncho-pneumonic, lobular, areas of inflammation and occasionally from the section of a consolidated lung the confluence of many smaller areas can be clearly recognized.

The right lung is oftenest affected and the lower lobes of both the right and left lung oftener than the upper lobes.

The course of croupous pneumonia is typical and for a hundred years pathologists have recognized three stages in the inflamed lung, viz.: 1. Engorgement. 2. Red hepatization. 3. Gray hepatization.

In the stage of engorgement, or hyperaemic œdematous stage, there is in the alveolæ, sèrous exudate (inflammatory œdema) which contains many red blood corpuscles. We find further leucocytes of the poly-morphonuclear variety, desquamated,

swollen epithelial cells rolled into masses and hyaline alveolar epithelium.

Fibrin threads are present which become more and more numerous as the disease advances. The fibrin is doubtless derived from the blood, rather than from changed epithelium as was formerly assumed.

Alveolar epithelial cells offer support to the capillaries of the lungs. Changes in this epithelium deprives the capillaries of support and they become greatly distended. There is increasing transudation of fluid parts of the blood and in addition red corpuscles escape freely. Aufrect states that the stage of red hepatization is not the result of exudation but is due to the coagulation of blood which escapes from ruptured capillaries. The hemorrhagic character of this stage is shown by the appearance of blood in the sputum.

The lung is filled with blood, dark blue red in color and heavier than usual. When pressed there oozes from the cut surface a sticky, grayish red, slightly foamy fluid. The lung contains much less air, the tissue almost without crackle when squeezed. Small portions of the lung still float upon water. The sputum is rusty, or prune juice in character. This stage lasts twenty-four to forty-eight hours.

In the stage of red hepatization the lung is dark red in color, the vessels turgid, the fibrin formation is greater. Network of fibrin threads appear, the fluid grows denser and denser until the consistence of the lung is that of liver tissue. The lung is devoid of air, strigingly heavy and voluminous and pieces of lung no longer float. The tissue tears easily, the lung pits upon pressure as does an œdematous leg. The velvety, or granular appearance of the cut surface is here most pronounced. Lightly scraping the cut surface with a knife blade, granules and occasionally fine spirals with cloudy sanguinolent fluid are seen. These granular contents of the alveolæ are firm and become softer as the color of the lung becomes grayer. This granular appearance is best seen upon a broken surface of the friable lung.

In this stage, with pulmonary tissue infiltrated with fluid exudate in the alveolae and over-filled blood vessels, there is reason to believe that the lobe or lung is increased over its size in full inspiration. At times the imprint of the ribs appears on the surface of the lung.

The exudate in this stage at first contains many red blood corpuscles, leucocytes, detached, swollen and granular epithelial cells. If the blood be washed away the color of the lung is gray. Sections treated with Weigert's fibrin stain show threads of fibrin extending from an acinus to adjoining ones, fibrin masses in blood and lymph vessels and threads of fibrin in the alveolar septi. In the beginning of the stage of red hepatization, the pneumococci are present in great numbers and are at their maximum virulence (Welch), many in the body of the leucocyte.

Another microscopic picture noted is that the distribution of fibrin and leucocytes in the alveolæ is not uniform. At times in the bronchioles and infundibula one sees practically only leucocytes and di-

plococci, while in the alveolæ is mostly fibrin and no cocci. This conjunction of leucocytes and cocci is looked upon as chemotactic workings of the micro-organism. This stage lasts three or four days.

The stage of gray hepatization resembles in many particulars the preceding stage. In size, consistence, weight and friability there is little difference. The red color however is replaced by a light gray. The granular appearance is gradually lost and from the cut surface, which apears moist, as compared with the preceding stage, a cloudy grayish yellow, later yellowish, pyoid material is easily pressed out.

Microscopically we see here no blood but many leucocytes (many fatty). The fibrin is lessened, amorphous and granular, no longer showing net-work of fibres. The large numbers of leucocytes which gives to the fluid a purulent appearance comes from the capillaries and veins, the blood of which contains increased numbers of leucocytes (inflammatory leucocytosis).

The exudate degenerates into an emulsion of fatty degenerated cells and molecularly decomposed fibrinous exudate and becomes absorbable. It must be remembered that this fluid is not pus. While it is true that occasionally in pneumonia the fluid becomes purulent, this is not a part in the evolution of typical croupous pneumonia. The diplococci become rapidly less and less in number. Clinically the stage is marked by critical fever fall, profuse sweating and great sediment in urine.

The emulsion like exudate is in small part expectorated and in much greater part absorbed, and absorbed with such rapidity that this affords one of the most remarkable features of this disease of so many pronounced features.

In about fourteen days the lung is again air containing, but still engorged and somewhat friable which quality it rapidly loses.

Duration. — Pneumonia persists usually one to two weeks. Cases occur in which the disease runs a shorter course or a more protracted course. Leube has reported cases of pneumonia in which the initial symptoms and the critical fever fall occured within twenty-four hours, these cases without doubt croupous pneumonia. In a recent number of the *Munchener Medicinische Wochenschrift*, ten cases of so-called "one day pneumonia" are reported from Leube's clinic at Wuertzburg.

The difference in the length of the period of the disease seems not to be due solely to the susceptibility of the individual but to some inherent biologic character of the diplococcus pneumoniæ.

Death may occur in any stage of the disease. In about one-third of fatal cases death occurs in the stage of gray hepatization, in consequence of heart insufficiency, if resolution is delayed beyond the seventh day at which time it usually occurs. The greater number die on the tenth to twelfth day of the disease.

Bacteriology.—For the production of genuine pneumonia the presence of specific micro-organisms is necessary. In by far the greater number of cases, the pathogenic organism is the diplococcus pneumoniæ of Fraenkel-Weichselbaum, or the diplococcus lanceolatus as it

has been called.

This is a round, later oval or lancet shaped organism, mostly arranged in pairs, or perhaps in chains of three or four or more links. In the body of the animal the organism shows a capsule which is as a rule absent in the artificially cultivated organism. The organism is found throughout the world and has been found in the throat and nasal secretions of individuals who have never had pneumonia. Van Besser found it in the nasal secretions of 14 per cent. of 57 individuals examined.

It seems clear that the micro-organism was first isolated in 1880 by Sternberg who inoculated rabbits with his own sputum. Pasteur discovered the same organism a few months later in the sputum of a child. At this time the relation of this micro-organism to pneumonia was not suspected. Four years later, in 1884, A. Fraenkel showed that this organism, already described by Sternberg and Pasteur, was the most frequently encountered organism in acute pneumonia.

In 1883 Friedlander described a micro-organism which is now called the pneumobacillus. He saw the organism that was later cultivated by Fraenkel but Friedlander in cultivating the micro-organisms of pneumonic sputum employed gelatine at room temperature, whereas, Fraenkel employed higher temperature, this marking one of the important cultural differences between the Friedlander pneumobacillus and the diplococcus pneumoniæ of Fraenkel-Weichselbaum.

Great controversy now arose as to the relative importance of the Friedlander pneumobacillus or the Fraenkel diplococcus in the production of croupous pneumonia. The controversy waxed warm until 1885 when Weichselbaum, from a very extended study of the bacteriology of the disease, reported that in 129 cases of pneumonia he found the diplococcus pneumoniæ in the lungs 94 times. He found it also in pleurisy, pericarditis, endocarditis, meningitis and arthritis complicating pneumonia. Thus the name of Weichselbaum came to be associated with the name of the micro-organism.

The cultures of this diplococcus rapidly lose their virulence and the organism dies. The full virulence of the diplococcus may be retained by repeated passage through the body of particular animals, and the characteristic form, which is lost by continued cultivation on artificial media, is thereby fully restored. Mice and rabbits are particularly susceptible to the action of this organism. The diplococcus pneumoniæ is Gram positive while the Friedlander organism loses its color by the Gram method. The organism is most abundant in the lung in the stage of red hepatization.

The virulence of the pneumococcus in pneumonic sputum varies in different cases. A writer in a recent number of the *Zeitschrift f. Klinische Medicin* reports some interesting observations upon this point. He found that white mice inoculated with 1 c. c. of the sputum from a very grave case of croupous pneumonia died in eight to ten hours. The same amount of sputum from a case of moderate severity destroys the mouse in 11 to 20 hours, while

1 c. c. of sputum from a mild case proved fatal to the animal after 20 to 45 hours. He also shows that the virulence of the sputum does not disappear with the crisis but persists for 24 hours or longer. The crisis in pneumonia is not due to the loss of virulence of the diplococcus. He suggested the value of inoculation of mice with the sputum as a prognostic measure as well as to determine relapse in pneumonia.

The diplococcus may excite serofibrinous inflammation and purulent inflammation if the organism infects a serous surface. Acute nephritis may result from the presence in the kidney of this organism.

It has long been known that serofibrinous or purulent meningitis results from the diplococcus pneumoniæ, independent of the presence of pneumonia.

Occasionally the Friedlander pneumobacillus appears to induce croupous pneumonia. Pneumonia may follow streptococcic infection. In this form of pneumonia we find many small areas of inflammation in the lung. The influenza bacillus may accompany the diplococcus pneumoniæ and it has been stated that the influenza bacillus may of itself induce pneumonia. It has been observed that with the influenza bacillus complicating pneumonia a diffuse purulent bronchitis is the accompaniment, this bronchitis involving other areas than the pneumonic areas.

Blood.—The diplococcus by modern methods may be isolated from the blood in practically every case of pneumonia. In the majority of cases leucocytosis is present, the polymorphonuclear neutrophiles showing the increase. It has been thought that leucocytosis is a favorable indication, a leucopenia an ominous symptom. At this time according to statements of recent investigators there is no positive evidence supporting the claim that the presence of leucocytosis influences the course of the disease. It has been observed that the blood platelets are nearly always increased in pneumonia.

Weather.—From statistics gathered from American and European sources it appears that about 70 per cent. of the cases of pneumonia occurs in the cold months, and 30 per cent in the warm months. The number falls to the minimum in July, August and September. Mere temperature alone seems not to be responsible for the change in frequency of the malady. In certain countries in the arctic regions, in Iceland, where the temperature average is low, the disease is not common, while in Italy and India pneumonia is a frequent disease. Attention has been called to the fact that in the localities where pneumonia is observed the larger number of cases occur at the time of the year when the greatest sudden shifting of temperature is experienced.

The role which chilling of the body plays in the production of pulmonary disease has been studied experimentally by Lode in the laboratory of hygiene in Vienna. He shaved one-half or two-thirds of the bodies of animals, placed them in the incubator for one-half hour, dipped them into water and placed them in direct draughts of air. Then into the animals he injected, subcutaneously, 1 c. c. of a culture of

the pneumobacillus. In 24 to 48 hours the bodies of the animals showed pleural and peritoneal exudate in which countless pneumobacilli were found. Control animals to which the injection was given without previous preparation of the animal remained unaffected. Guinea pigs, chilled in the same manner, were made to breathe the dust of a culture of the pneumobacillus. These animals died within two to three days of double pneumonia with hepatization.

Experiments with staphylococci were made on animals in the same manner, the chilled animals as a rule succumbing, the control animals as a rule remaining sound. If the shaved animal, after chilling, was enveloped in warm woolen covering, the susceptibility was strikingly lessened. In these experiments 85.8 of the chilled animals succumbed while in the control animals but 12.2 succumbed. Lode concludes that "here as in other fields of biological research we must conclude that the pathogenic organism is only one factor in the production of infection and that other conditions are operative in the body which we group under the general term individual predisposition."

Sex.—More men than women suffer from pneumonia. Statistics show that of the cases 72.2 per cent. are men, 27.8 per cent. women. Without going further into the statistics of this feature of pneumonia it seems clear that this is only due to difference in occupation and not the sex, for it is an accepted fact that those who by their work are exposed to the weather furnish the larger number of cases of this disease.

Age.—From the world's statistics it appears that a little more than 50 per cent. of the cases occur between the ages of 20 and 40 years and over 80 per cent. are from the 10th to the 50th year, ages at which individuals as a rule suffer most exposure.

One attack of pneumonia in no wise protects the individual from subsequent attacks. On the contrary it gives predisposition to other attacks of the malady. This is remarkable when we see surprisingly few relapses in croupous pneumonia.

An established fact is the development of pneumonia after contusion of the chest. The disease usually develops on the side of the injury. Thus Mennier studied 25 cases of the disease and found in 18 traumas of the right side, right side pneumonia occurred 15 times and bilateral involvement three times. In seven left-sided injuries seven left pneumonias occurred.

A word may be said here of so-called ether pneumonia. Osler states that at Johns Hopkins Hospital they have averaged 3 or 4 cases a year. Czerny it is stated has restricted largely the use of ether in his clinic on account of injurious after effects on the respiratory system. Pathogenic organisms are almost always present in the lungs. It seems most probable that prolonged etherization, by chilling the pulmonary tissue and lowering the vitality of cells in the bronchioles renders the tissues incapable of withstanding the attack of bacteria.

DIAGNOSIS OF LOBAR PNEUMONIA.

By H. D. Jerowitz, M. D., Kansas City, Mo.

The diagnosis of lobar pneumonia is, as a rule, easy; nevertheless, its presence is oftener overlooked than one would believe. The average typical case of two or three days' standing presents such a complete picture that even the layman can diagnose it; it behooves the physician, therefore, to recognize the condition early, before the patient or friends suspect it. We are able to do this with other diseases; for instance, we diagnose measles by the Koplik spots, and we should, as a rule, be able to recognize pneumonia in its inception, because its onset is quite characteristic. Given a robust individual, previously well, who is suddenly taken with a chill lasting perhaps half an hour and followed by a temperature of from 102 to 105, with malaise, a slight cough, or a feeling of tightness in the chest, it is wise to examine the throat, and if we find no indication there nor any other local cause, then we suspect pneumonia, which, even without any physical signs, is the most probable condition. Quite frequently a patient thus afflicted attends to his duties the first day, being up and about, and, not deeming himself so very ill, seeks the doctor in his office for a prescription. While the same is also true with many typhoid fever cases, the history is nevertheless different. At any rate, we may enunciate this principle and teach it to the students: When an adult presents himself with a temperature of 103 or more, if no sore throat or other local trouble (epididymitis, for instance) is present, suspect either pneumonia or typhoid fever, according to the onset, and make a careful examination with these in view. Let us avoid the term "touch of pneumonia." There is no "touch" of anything; it either is or is not a certain thing. We should also be careful about pronouncing it a "mild" case, just because we find few or no physical signs, for, if our presumption is correct, they soon develop with a vengeance. We should further be careful of calling these cases "grip" or malaria, or else in a day or two when the classical symptoms of pneumonia appear we find ourselves saying something about its having "developed" from the other—a wonderful doctrine, that of transmutation of diseases, so well exploited by the laity and strengthened by the silent acquiescence of our worthy profession.

Let me refer to another axiom: A high fever lasting more than one day should lead us to look for lobar pneumonia or typhoid fever; occasionally, acute miliary tuberculosis.

To go one step further, we might say that the combination of high fever, rapid pulse, and increased respiration is strongly indicative of

an acute pulmonary disturbance, the last mentioned symptom alone being almost sufficient.

We should also make it a rule to suspect pneumonia in all cases of delirium or delirium tremens when accompanied by elevated temperature. The latter is often the only symptom of a drunkard's pneumonia.

A continued high fever of 105 to 106 in a child, ushered in suddenly with or without convulsions, and without any apparent cough is lobar pneumonia, usually of an upper lobe, and careful percussion may be the only way of eliciting it. Our diagnosis in these cases is often confirmed only when the temperature drops suddenly to normal about the fifth, sixth, or seventh day. The fact that some patients have no cough nor pain should not mislead us; the former is not an early symptom, while the latter is only present if the pleura is involved. We have to deal principally with the toxemia—the pneumonic infection—, the severity of which does not, as a rule, depend upon the amount of local involvement.

Of course, we all meet with obscure cases where the differential diagnosis is difficult, and it is to these that we wish to devote a little time in this discussion.

1. *Cases resembling typhoid fever.* Confounding with this affection is frequent, especially when the lower right lobe is involved, which is true in the majority of cases. Let us note the points of difference:

	LOBAR PNEUMONIA.	TYPHOID FEVER.
Previous Attack.	May have had.	Does not recur. If patient has had typhoid, then the case is probably pneumonia.
Onset.	Sudden, usually with chill lasting about half an hour and followed by fever.	Slow, insidious.
Prodromes.	None. Patient may have had slight cold.	Epistaxis, anorexia, bowel disturbance.
Temperature.	High and irregular; very changeable; sometimes higher in axilla of affected side.	More uniform and of characteristic curve.
Pulse.	Rapid and strong (120-140).	Slow and weak (60-90), sometimes dicrotic.
Respiration.	Fast. Lagging of chest on affected side, retraction of sterno-cleido-mastoid and scaleni, dilatation of alae nasi, cyanosis of cheeks or lips.	Normal ratio; expansion even on both sides.
Spleen.	Somewhat enlarged.	Usually hard and enlarged.
Bowels.	Sometimes diarrhœa. Spots occasionally present, but not like the roseola.	Diarrhœa, when present, is characteristic. Constipation frequent, tenderness over caecum, roseola.
Sputum.	When present is characteristic, sticks to side of vessel, contains fibrin clots, dendritic in character, may be seen best when shaken in a test tube with water. Contains also Fraenkel-Weichselbaum pneumococcus.	None of importance.

Urine.	Chlorides decreased, urea increased. Albumen rarely	Albumen often present. Diazo reaction.
Herpes.	Herpes labialis or nasalis often present on second or third day.	Usually absent.
Decubitus.	Patient lies on side, usually the affected one.	Usually on back.
Pain.	When present, over affected area; often referred to abdomen or lumbar region, especially in children.	Headache, abdominal tenderness.
Cough.	Short, tight, suppressed.	Usually present, dependent upon bronchitis.
Mensuration.	Slight increase on one side.	None.
Widal Test.	Negative.	Often positive.
Blood. (Leucocytosis).	Blood rich in fibrin. Leucocytosis increased.	Leucocytes normal or diminished (leucopenia), as low as 5000 to 1800.

A few hours after the initial chill, the number of leucocytes increases to twenty, thirty, or even sixty thousand per cmm., falling considerably after twenty-four hours, but remaining more or less above the normal while the fever lasts. Shortly before the crisis the polynuclears constitute about 80 per cent. of the total number of leucocytes. After defervescence the proportion falls gradually to about 57 per cent., at which time there is observed an increase of lymphocytes and eosinophiles, the latter varying from 3 to 7 per cent. In cases terminating fatally there is little or no increase of leucocytes.

2. *Pleuritis with Effusion.*

	LOBAR PNEUMONIA.	PLEURITIS WITH EFFUSION.
History.	Usual Onset.	Slower process.
Inspection.	Lagging on affected side, etc.	Intercostal spaces flat or bulging.
Palpation.	Fremitus increased, bronchophony (except in massive pneumonia.)	Fremitus diminished or absent.
Mensuration.	Somewhat enlarged.	Considerably enlarged.
Percussion.	Tympanitic at first, dullness later. Often nothing found.	If on right side, lower border of liver is lower, heart displaced to left. If on left side, dullness encroached on semilunar space, heart displaced to right. Upper line of dullness changes with position of patient, unless incarcerated by adhesions.
Auscultation.	Bronchial breathing, rales, pleuritic friction.	Vesicular breathing, but faint and distant. May be absent.
Expectoration.	Characteristic Sputum.	None.
Temperature.	High.	Not so high.
Leucocytes.	Increased.	Normal or slightly diminished, unless empyema.
Chlorides in Urine.	Decreased.	Normal.
Puncture.	Blood.	Serum or pus, if reached.
Phlegaphonia.	Positive.	Negative.

Phlegaphonia is of use where the patient is either unable to speak or it is not advisable for him to do so. An assistant places a pleximeter on the thyroid cartilage, and percusses with the hammer. The patient is

directed to close the mouth. The examiner auscults over the dull area during expiration, and, if the lung is consolidated a loud tympanitic sound is heard, the ear having a sensation of receiving the blows directly. The vibrations produced this way take the place of those of the vocal chords during phonation.

3. *Purulent meningitis.* This is rare. It is accompanied by intense headache, rigidity of the back of the neck, and stupor increasing to coma. There is also leucocytosis. Here we must be guided by the history and course.

4. *Miliary tuberculosis.* This is rather difficult to diagnose *per se*, but the history, the course of the fever, and the presence of tubercle bacilli will aid us greatly in the exclusion of pneumonia.

5. *Endocarditis.* Patients with an old heart lesion resulting from rheumatism are easily susceptible to pneumonia, and what is often pronounced an acute attack of heart trouble is in reality a pneumonia, which, in these cases, is not suspected. The tumultuous action of the heart, the increased prominence of the murmur, and the distress of respiration are due to the pneumonia infection, aggravated some by the heart lesion.

6. *Irritant poisons and burns of the chest.* Cerebral symptoms following these are usually dependent upon a pneumonia or congestion of the lungs.

THE PROGNOSIS OF LOBAR PNEUMONIA.

B. E. W. Schauffler, M. D., Kansas City.

The longer a man has been practising medicine the more likely he is to agree with Tyson in his characterization of lobar pneumonia as a "treacherous and uncertain disease."

The impression which is prevalent in the community generally as well as in the medical profession that more people die of pneumonia than there did twenty-five or thirty years ago is correct. This does not, however, imply that a greater proportion of the cases of pneumonia prove fatal now than formerly, but only that more people suffer from the disease now than there did fifty years ago. This may be partly due to the prevalence of epidemic influenza during the past sixteen years, but still more so to the increase of our urban as compared with our rural population; the crowding together of vast numbers of people in unwholesome tenements, often poorly fed, and more addicted than their country brethren to the use of alcoholic stimulants and to excesses of every sort. In Chicago during the decade ending in 1900, pneumonia replaced phthisis as the principal cause of death, the figures being 18.03 per 10,000 inhabitants as compared to 12.36 per 10,000 during the previous decade. Careful statistics from some of our larger cities, however, show no increase in the ratio of

deaths to the number of cases of pneumonia.

The mortality of the disease may be stated as being, in hospitals from 20 to 40 per cent., in private practise from 6 to 15 per cent.

Anders quotes Wells who gives, as the result of the collection of 223,730 cases, a mortality of 18.1 per cent. The lowest mortality rate cited by various authors, is that of 40,000 cases occurring in the German army with 3.6 per cent. of deaths. These, of course, were among picked men, in the prime of life, under more than ordinarily favorable conditions.

Among the conditions which influence the prognosis may be mentioned:

1st. *Race.* Negroes succumb to the disease more readily than whites, even where other conditions are alike for the two, as, for instance, in the army. The same seems to be true of Mongolians and is undoubtedly true of the North American Indians. 2nd. *Sex.* The disease is more frequent in men but more fatal in women. 3rd. *Age.* Early childhood and old age, especially the latter, give the greatest mortality. 4th. Pre-existing acute febrile diseases, as the exanthemata, typhoid fever, sepsis, etc., influence the prognosis very unfavorably. 5th. The same is true of chronic diseases, as rheumatism, diabetes, nephritis, etc. 6th. *Alcoholism.* The high mortality among alcoholics is too well known to require comment. Dr. Andrews H. Smith of New York gives the following table: In 428 cases the death-rate was: In the markedly alcoholic, 70 per cent.: in the moderately alcoholic 32 per cent.; in the non-alcoholic 30 per cent.; in old age as well as in alcoholics cyanosis is liable to set in early with all the symptoms of heart failure, as very rapid and irregular pulse, rapid or very labored respiration, etc. 7th. *Extent of Lesion.* This undoubtedly cuts considerable figure in the prognosis, although I do not think it is quite as conclusive as is often claimed. The violence of the attack and the degree or the virulence of the general infection seem to me to be of much more consequence. We have all seen cases involving the whole of one lung, or part of both lungs make a comparatively uneventful recovery, while in others where the extent of the consolidation was so limited as to escape early recognition, the fatal end has come quickly.

a. Double pneumonia is undoubtedly, as a rule, more fatal than that confined to one side, although it is far from being as hopeless as is generally believed. The mortality may be averaged at about 50 per cent.

b. Apex pneumonia, or that involving the upper lobe alone, is not, in my opinion especially dangerous.

c. Migratory pneumonia always keeps the attendant anxious, until the limit of advance is reached and each case must be judged by itself.

d. Massive pneumonia, where the bronchi are filled solid, is perhaps always fatal.

e. Grippe pneumonia, according to my experience, is not uncommonly fatal, although the recovery is usually quite slow. Some authors think it is more liable to be followed

by pulmonary tuberculosis. I do not believe this is true in private practice among the middle and better class of people.

f Typhoid pneumonia does not imply a complication with typhoid fever, but only a low degree of vitality in the patient or an overwhelming toxemia, with the consequent typhoid symptoms of stupor, muttering delirium, dry tongue, etc. The prognosis is bad, about 80 per cent. dying.

Among the unfavorable complications may be mentioned meningitis, which is almost always fatal. The same is true of delirium tremens. But it must be remembered that not all active delirium is to be credited to either of these heads. The previous existence of endocarditis, or its occurrence in the course of a pneumonia, is very unfavorable. Empyema does not greatly vitiate the prognosis.

Unfavorable symptoms are an accentuated second pulmonic heart-sound, very rapid pulse or respiration, especially the former, great dyspnea, early cyanosis and extreme restlessness and delirium. On the whole the prognosis in the individual case, can best be estimated by observing the conditions of the general circulation and the way in which the heart is doing its work.

TREATMENT OF LOBAR PNEUMONIA.

By B. H. Wheeler, M. D., Kansas City.

This disease may rightfully claim the distinction of having the greatest diversity in the methods of treatment, and more than any other suffers from the common abuse of over-treatment. No treatment of pneumonia can be rational without a true conception of the morbid process. This has already been made clear by Dr. Murphy.

It is evident, then, that our chief efforts must be directed against the toxemia by neutralizing the toxin, by limiting its production, by aiding its elimination, and by antidoting its poisonous effects. It is important that we also recognize the fact that pneumonia is a self-limited disease, incapable of being aborted, running a definite course, and very often terminating spontaneously without any medicine having been given.

Dr. Manges very aptly says "we should bear in mind that we are not treating pneumonia, but rather a patient with pneumonia; that some will die in spite of all treatment and not a few perish as the result of it."

Under the consideration of the general care of the patient, I am convinced that one of the most important factors in the successful management of these cases is plenty of pure air, free ventilation without exposing the patient to drafts, and if the sick chamber be heated by furnace, provision should be made to supply additional moisture. The temperature of the room should not

be allowed to rise above seventy degrees F., except at such times when it is necessary to expose the patient.

Plenty of pure, cold water should be freely given, and should the patient be delirious, it should be insisted upon at regular intervals. If there is a distaste for water, add the juices of fresh fruit. Carbonated water, however, should be studiously avoided, for the reason that the system already suffers from an overproduction of carbonic acid gas, and its powers of elimination are already taxed.

The food should be exclusively liquid, and consist chiefly of milk. The importance of proper diet cannot be over estimated, and the digestive organs should be spared all unnecessary effort; failure to give them proper consideration may result in imperfect digestion, with resulting fermentation and distention, which by intra-abdominal pressure, may greatly embarrass both circulation and respiration.

A tepid sponge bath should be given daily for the sake of cleanliness and comfort, and to encourage diaphoresis, except, however, during the period of the crisis.

The nurse should be instructed to carefully and frequently cleanse the mouth and teeth with some pleasant alkaline antiseptic solution, and if there be present an uncomfortable dryness of the tongue, to paint it over with glycerine.

The clothing should be warm but not cumbersome, and the general surroundings made as cheerful as possible.

If the patient be aged or feeble, the nurse should be instructed to change their position in bed occasionally, as too long in one position induces hypostatic congestion.

Unnecessary exertion on the part of the patient should be forbidden; this is especially applicable in beginning convalescence.

As I approach the subject of medical treatment, it is with no small degree of hesitation; for, after centuries of close observation and earnest investigation, we have as yet no specific treatment for pneumonia. Yet, there are remedies which, in the hands of our foremost clinicians, have yielded results which entitle them to respectful consideration.

The four agents which are most often employed, and no doubt do exert a favorable influence upon the course of the disease, are antipneumonic serum, quinine, digitalis and creosote carbonate.

Antipneumonic Serum is too new to render an opinion which would be reliable; many physicians of note proclaim its virtue, and assert that the results thus far noted encourage them to continue its use. Fortunately, it is never harmful, if ordinary care is observed in its administration. The very few reports I have at hand places the mortality at 13.5 per cent., which is not at all convincing and leaves me open to conviction.

Quinine, as a routine treatment, is held in high favor by many, prominent among whom were Nothnaegel and Yeo. The basis for its employment is founded upon its apparent inhibitory influence, upon the activity of the bacteria or their toxines, and not as an antipyretic alone. They have been led to believe that

quinine in some degree is an antitoxin to the toxins of this, as well as many other, infective organisms, but in what precise manner they do not attempt to explain. We know that it does stimulate leucocytosis. Great stress is laid upon the method of administration, and each claims advantages and results that can be obtained in no other way. Nothnaegel preferred the (neutral) tannate of quinine, which is tasteless in 15 grain doses (being equivalent to about 5 grains of the muriate) combined with an equal quantity of the saccharated oxide of iron (10 per cent.) given as a powder three times a day throughout the course of the disease. Yeo gives preference to the sulphate in 1 to 3 grain doses every two to four hours, according to the severity of the attack. This he combines with citric acid and saccharum lactis, aa gr. x. This is then dissolved in a small quantity of water, to which is added the following: Potass. bicarb. gr. x.; ammon. carb. gr. iv.; Syr. aurantii, dr. i, and water, q. s. one ounce. The addition of this alkaline solution to that of the quinine with citric acid, produces effervescence which greatly improves its palatability, and enhances its medicinal value.

Professor Weber of the New York Post-Graduate, recommends doses of 15 grains of the sulphate twice daily during the entire course of the disease. Quinine in my hands, has usually seemed harmful, owing to the production of gastric disturbances, and an increase of nervous manifestations. Yet, I am free to confess that this may have been due to an improper method of administration.

Digitalis, which is now enjoying some popularity, was first employed in the treatment of pneumonia by Rasori but at that time did not find general favor. Lately, however, this drug has again found a very enthusiastic champion in Petrusco, who advises its use in all cases of pneumonia when seen early, in such enormous doses as 60 to 180 grains of powdered leaves, by infusion, three times a day, for the first two days only, and claims by this method that the course of the disease will be favorably modified, if not aborted, provided, however, that there be no pre-existent organic cardiac lesion, arterio-sclerosis, or kidney disease, in the presence of which such doses are contra-indicated. His mortality rate, while in the beginning was quite remarkable (only 1.21 per cent.), has since increased to 2.06 per cent., which even yet, is extremely low. It should be taken into consideration that these cases were tabulated in a Central Military Hospital. Frankel, who also prefers this remedy, administers 50 to 60 grains of the powdered leaves by infusion, daily for the first three days of the disease, except to persons over fifty years of age, and to alcoholics. Nothnaegel and Von Juergensen advise against its use as a routine practice, yet believe that it has a field of usefulness at certain times in selected cases, and the latter gives us a valuable guide for its employment as follows: "In a person previously suffering from cardiac weakness, or who in the course of the disease, develops cardiac insufficiency, if the pulse, without obvious reason, becomes greatly accelerated, and at the same time irregular, dig-

italis is indicated; the indication or contra-indication depends upon the pulse remaining full or empty; if the volume is good, then one may expect something from the remedy, especially toward the end of the disease, in which one of the favorable signs is not rarely a slight irregularity of the pulse."

I am incompetent to render an opinion as to the advisability of employing digitalis as a routine treatment, based upon personal experience. The few attempts I have made to use it have engendered a prejudice against it, yet I have never used it in the quantities recommended. Procuring a reliable drug is always attended with an element of uncertainty, the gastric disturbance which is usually produced is undesirable, and its effects, in any disease attended with high temperature are always questionable.

The remedy, which, in my limited experience, comes nearest to a specific, is the carbonate of creosote. This remedy was first used extensively by Dr. Van Zandt, of Fort Worth, Texas, since 1894. He was led to do so by observing a marked improvement in a pneumonia patient to whom he had given creosote for intestinal disturbance. Subsequent trials greatly impressed him with its efficacy, and it is his routine practice to use an average dose of two and a half drams in twenty-four hours, given either in two or four doses. He has collected reports of 1130 cases treated by this method, with a mortality of less than 5 per cent.

Doctors Cassoute and Corgier, of Marsailles, France, in a published report, state their belief that pneumonia, in all its complicated forms, has lost its danger in the presence of the various derivities of creosote.

My attention was first attracted to this method of treatment by Prof. Reynold W. Wilcox, of the New York Post-Graduate School and Hospital, in 1904, who, at that time, was very enthusiastic concerning its use in a large Hospital and private practice; in a recent communication, he advises me that he yet holds this remedy in the same high favor. He has tabulated 250 cases, with a mortality of less than 5 per cent. in private practice. In hospital practice the mortality was about 15 per cent., owing to the large number of alcoholics included in the series. Personally, I am convinced that it does influence favorably the course and symptoms of the disease, and it is free from many of the objections that may be made to other remedies. Its first advantage is being so well tolerated by the stomach, even with unnecessarily large doses: there is entire absence of caustic or irritating effects. It is antiseptic. It is not acted upon by the stomach, but arrests bacterial decomposition, if present, and passes to the small intestine, where it is broken up into creosote and carbonic acid gas, is slowly absorbed and eliminated principally by the lungs.

It is reasonable to presume that it exerts a direct inhibitory influence upon the bacteria in the blood current, and the foci in the lung for the reason that there soon follows a gradual reduction in temperature, a conspicuous absence of the signs of the severe toxemia, and the case usu-

ally terminates by lysis and not by crisis; or, if crisis be present at all, by a less abrupt and less severe type. This fact is an argument in its favor that it does limit the activity of the infection, thus making it unnecessary for the vital forces to manufacture the quantity of antitoxin which, in the absence of such influences, would ordinarily be required.

Creosote carbonate can be taken pure, and followed by a little milk or wine, but is best given in emulsion; the average adult dose is 15 m. every three hours, but this quantity may be doubled without any unpleasant effect. There is one condition sometimes produced as a result of creosote carbonate, which, in the minds of many physicians, renders its use objectionable, namely, smoky urine; this is not a contra-indication, and is of no significance, except in the aged.

Nephritis is rare, while a concentrated, reduced urine showing the presence of albumen, is common, consequently, I think it advisable to employ some mild diuretic while such a condition exists; I usually choose spts. mendererus.

If you desire to gain the immediate gratitude of the patient, your first endeavors should be directed toward the relief of the distressing pleuritic pain; this usually yields to mustard poultice; some prefer the ice bag, claiming for it the advantage of being more cleanly, and at the same time helping, in a measure, to reduce temperature; yet, intercostalneuritis may result from its too persistent use. Patients usually complain less of heat than cold, and the results are usually more rapid and satisfactory. When the poultice is removed, the chest should be enveloped in a neat fitting cotton and oil silk jacket. Should the pain persist, resort may be had to the Pauquelin cautery, adhesive straps, or the hypodermic injection of heroin hydrochlorate, ⅛ gr., repeated when necessary.

Opium and its alkaloids, should be avoided, if possible, for it is not unlikely that the influence it exerts by interfering with elimination may be harmful, should the case become critical; this is particularly true in aged and feeble patients; yet, if the pain resists the ordinary measures, and the patient suffers also from the want of sleep, then heroin, or even morphia, may be considered the lesser of two evils.

For the intense headache, frequently met with during the initial stage, an icebag applied to the head is usually sufficient.

We are to remember that temperature ranging upward to 104 degrees F., and even 105, is to be expected, and by many, is regarded with favor, as an index to the patient's resistance. Yet, such temperatures are harmful, if allowed to continue for any considerable length of time, and in such an event are best controlled by systematic sponging with cold water. This should be cautiously applied, allowing only one portion of the patient's body to be exposed at one time.

At no time are cold baths permissible.

Under circumstances which render cold sponging especially difficult, one or two moderate doses of phenacetin are not objectionable, while the continued use of any of

the coal-tar antipyretics, is certainly harmful.

To meet the emergency of threatened heart failure, in the words of Osler, "Now, the judgment and resources of the physician are taxed to the utmost." We are taught that heart failure may occur in two ways; one, as a result of the resistance met with by the right ventricle on account of the mechanical obstruction in the lung, evidenced by increasing cyanosis, increasing shortness of breath, signs of edematous infiltration in the lungs and a small and feeble radial pulse. At such a time venesection is clearly indicated, and the withdrawal of from eight to sixteen ounces of blood (to be repeated, if necessary) is usually followed by improvement. Strychnia nitrate should be administered hypodermically in doses of 1-20th to 1-40th grain, every two to six hours, as required.

The second cause of heart failure is due to a direct poisoning of the heart muscle, owing to the intensity of the toxemia. This is evidenced by increasing pallor, marked general prostration, muttering delirium, irregularity of breathing, subsultus, cold extremities, small, feeble and very rapid pulse. Under such conditions strych. nitrate is again indicated, as is camphor suspended in sweet almond oil; also, the hypodermic use of caffeine, and ether, the former being a splendid cardiac tonic, while the latter is a rapidly diffusable stimulant.

It is in this class of cases that Nothnaegel strongly advises the use of quinine muriate, hypodermically, 7½ grs. being the usual dose, a single injection being usually sufficient, rarely more than two.

Alcoholic stimulants at this time are decidedly beneficial; but their routine administration in the early stages of the disease is not only unnecessary, but harmful (except in confirmed alcoholics and the aged). The idea that its early employment tends to obviate cardiac embarrassment later, I believe to be erroneous.

REFERENCES.

Osler's "Practice."
Nothnagel "Diseases of Lungs."
Yeo "Clinical Therapeutics."
Merck's Archives, 1905.

PRELIMINARY REPORT OF A CASE OF SO-CALLED FOETAL ICHTHYOSIS*.

By Bernard W. Moore, M. D., and Louis Warfield, M. D., St. Louis.

(From the Bethesda Maternity and Bethesda Pathological Laboratory, Dr. E. W. Saunders, Superintendent.)

The remarkable disease which is commonly known in English medical literature as foetal ichthyosis, is so striking and uniform in its manifestations, that no description is necessary in connection with the report of a case. The disease, which probably develops in the third or fourth month of intrauterine life, is characterized by the occurrence over the whole surface of the body of thick epidermic plates of various sizes, separated by fissures and furrows, and by certain deformities of the eyes, ears, nose, mouth and extremities.

The etiology of this affection is unknown. Heredity apparently plays no part in its production. The absence of syphilis in the parents is generally shown in the recorded cases. The parents, indeed, in most of the cases have been healthy and strong. The one striking fact in this connection is that a woman who bears one ichthyotic child frequently bears another.

As to the nature of the disease, several theories have been advanced. The older writers regarded it as a monstrosity. Sir James Y. Simpson was the first to emphasize the view that it is a true ichthyosis. Later Hebra combatted this idea, and propounded the theory that it is a general seborrhoea. More recently Unna has classed it among the stagnatory tumors, due to a progressive disturbance of nutrition. Numerous writers have taken up these various contentions, and the matter is still to be regarded as *res non judicata* in dermatological pathology.

The mode of origin of the morbid process has been variously explained. Some of these ideas may be briefly mentioned. For instance, Loecherer suggested that the thickening of the skin is due to an excessive formation of sebum and epidermis, hindering exfoliation of the stratum corneum. Carbone believed there was excessive activity of the rete Malpighii. Barkow regarded it as occurring in two stages; the first characterized by the formation of bullæ, which burst, the tears forming the furrows seen later; the second, by hypertrophy of the papillae and thickening of the unbroken portions of the skin. Leloir regarded it as a trophoneurosis of the skin; Kyber, as a neoplasm; and Bowen as due to the persistence and adherence of the epitrichial layer.

It is a remarkable fact that there is no record of an ichthyotic foetus

*Read at the meeting of the St. Louis Obstetrical and Gynecological Society, December 14, 1905.

having been born before the seventh month. At the same time, many of the recorded cases were born prematurely, and while fairly vigorous at birth, rapidly succumbed in a few hours, or days.

That the disease is rare is shown by the fact that Riecke in 1902 was able to collect but 52 cases, to which some three or four may now be added.

The following case is of interest, in that it supplies certain deficiencies which have hitherto existed in the study of the disease, and presents certain conditions, which, when more fully worked out later, will, it is believed, prove of interest.

Mrs. C. (case No. 947), age 28, nativity, Illinois, entered the Bethesda Maternity Aug. 10, 1905. The patient was an average sized woman, with red hair and a fair, freckled skin. The examination of the viscera was entirely negative. The pelvic measurements were normal. The skin was normal, except for the lentigo.

Her mother, four brothers and two sisters are living and in good health. The sisters are married, and have all borne healthy children. The father died at the age of 50 of pneumonia, after a brief illness. Two sisters died of small pox in childhood. She has no further knowledge of her family history, except that her people have lived in the country, and have been long-lived, hardy and free from skin disease. She does not know of any consanguineous marriages in her family. She is not related by blood to her husband, who, she says, is a healthy man and of a healthy family.

Her personal history is negative, except an attack of typhoid fever in early childhood. Her menstrual life began at age 13. Menstruation was regular, painless, lasting four days, and of the 28-day type. Six years ago she became pregnant. The pregnancy was normal, but ended prematurely at the seventh month. At that time she lived in Oklahoma, and was attended by a negro midwife, who would not permit her to see the child, but buried it at once. She received the impression that there was "something wrong with the child," although the midwife refused to tell her about it.

The last menstruation was December 10-13, 1904. She suffered no discomfort during the pregnancy. Life was felt in May. During the night of August 9, the membranes ruptured, and the following day she entered the Maternity after a railway journey of forty miles, during which time the liquor amnii escaped freely. Pains began at 8 p. m., August 10th. The child presented by the breech, S. L. A., foetal pulse 140 and strong. The diagnosis of the foetal condition was made by touch. At 7:30 p. m., August 11th, the child was born. The placenta came away spontaneously a few minutes later. The placenta was intact and normal in appearance. The maternal surface was smooth and of normal color. The cotyledons were well marked, and no infarcts were noted. It was quite friable. Teased villi appeared normal under the microscope. Nothing abnormal was noted about the membranes and cord.

The child, a male, cried vigorously at birth, and presented a hideous and repulsive sight. It looked as

though it had outgrown its skin and burst through it. The whole surface of the body was covered by irregularly shaped plates of thickened-epidermis, from 2 to 4 mm. thick, of an ivory color, separated by furrows of a dark red or purplish hue. The largest plates were seen on the back, the furrows there running for the most part circularly. Over the front of the trunk, the plates were smaller, and the furrows more irregular in direction. About the joints, the furrows were as a rule circular, and more longitudinal along the course of the limbs. In places about the joints, where they were deepest, the fissures were bleeding. The greatest thickening of the skin occurred about the head, especially over the forehead, producing marked ectropion of the upper eye-lid. The mouth was held permanently widely open by the thickened skin. The nose was rudimentary, showing two orifices in the slight elevation which represented it. There was but a slight attempt at the formation of the ears, which were crossed on either side by deep furrow. The mucous membrane of the mouth and tongue appeared normal. The glans penis was uncovered, although the skin of the penis and about the rectum was thickened. The hands and feet were distorted, the skin being drawn tightly over the bones. The fingers and toes were flexed and rudimentary. The feet showed slight talipes varus. No vernix caseosa was found on the body. The weight was 2220 grms., length 49 cm.

The child cried almost continuously until its death at 6:30 p. m., Aug. 15th. During this time it took water and breast-milk eagerly from a dropper, suction being impossible owing to the condition of eclabium. All bodily functions were properly performed, up to the time of death. The skin was cold and clammy throughout, and the temperature subnormal. Before death a peculiar, offensive odor about the child was noted.

An autopsy was performed about eighteen hours after death. The portions of skin that had been ivory white were dull brownish. The fissures were bluish and reddish black. The skin was as tough as leather. All the organs were congested. No pneumonia or macroscopic evidences of atelectasis were noted. The thyroid and thymus were both small. The other viscera showed no marked macroscopic change.

Portions of all the tissues, including various parts of the skin, were hardened in formalin. No changes worthy of note were found in the liver, spleen, kidney, adrenal, lung, muscle and aorta. There was marked atrophy of the thymus gland, with calcification of Hassall's corpuscles. The changes in the thyroid were rather remarkable. They consisted in an enormous increase in the connective tissue of the gland, and an almost complete lack of colloid material and alveolar formation. Wherever it was apparent that alveoli probably had been, there were columnar cells lining the alveolus, and the centre of the alveolus was occupied by granular material, degenerated cells, both cells with deeply staining nuclei, and those, larger, with vesicular oval nuclei. At no place did it resemble the normal gland.

In sections of the skin, the chief change is the enormous thickening of the horny layer. The rete Malpighii appears to be thinned. The transition from the outer cells of this layer to the horny layer is abrupt. The horny layer is lamellated, and on the scalp, where it is thickest, it ocurs in whorls surrounding the follicles, where here and there hairs are seen in cross section. The sebaceous and sweat glands seem about normal. The horny process does not extend to the cells of the glands. The blood-vessels are much congested. The mucous membrane of the mouth and lips is quite normal, and the transition from it to skin is sudden and striking. Sections of the placenta and cord show nothing abnormal. The process of senility, as shown in the endarteritis of the blood-vessels and small infarcts, is just as far advanced as in the placenta and cord of a full-term child. It is possible that this may have had an influence in bringing on premature labor.

In the cases hitherto reported, a complete microscopic examination of the foetal adnexa has been wanting. In this respect the present report supplies a deficiency. In only two of the recorded cases has the thyroid gland been specifically mentioned: in Winfield's case, where it was totally absent, and in Daniel and Cordes' case, where it was found normal. Winfield was the first to suggest a possible relationship between the skin lesions and a deficiency in the thyroid secretion. The present case furnishes, at least, ground for interesting speculation in this connection, and reason for a careful study of the thyroid in cases which may be studied in the future.

EIGHT SELECTED CASES, REPRESENTING TWO PHASES OF GALL-STONE DISEASE.*.

By Willard Bartlett, M. D., St. Louis.

In presenting this paper on the ever interesting pathologic condition at hand, I shall confine myself to the following two distinct divisions of the subject.

1. A consideration of those cases which are never diagnosed, and the evidence of gall-stone disease found during the course of an operation for some other cause.

2. A discussion of those patients who suffer from obstruction of the common duct.

It seems to me there is an especial reason why these two subjects should be considered in the same paper. They represent the two extremes of our experience in this line of work. The first named, as might be supposed, is a class of patients who present the mildest kind of symptoms, which we see at all in this malady, whereas, the second class is composed of those who are the greatest sufferers, and among whom the mortality is the highest, whether they are operated upon or not.

The especial reason why it seems well to consider these two sorts of patients at the same time is, to bring out the necessity of preventing the mildest form of this pathologic condition from ever assuming its most serious aspect, viz., common duct obstruction.

We need no argument to convince us of the possibility of this dire accident complicating any case. We are all convinced that far the greater per cent. of all gall-stones are formed, originally, in the gall bladder, and that in any case, some of these may find a lodgment in the duct and thus produce a sudden menace to the health and life of the individual. However, it is not my purpose to discuss, in general, the pathology of gall-stone disease, or the genesis of gall-stones themselves. Hence I will go no further into this branch of the subject.

Before considering the histories of four cases, selected from my practice, in which gall-stones were found accidently, while operating upon another well defined pathologic lesion, it may be well to call to mind the chief points of diagnostic interest in this connection.

These omissions, I am free to confess, can be prevented in practically every instance, not only by the many others who are constantly making the same mistake, but by myself as well, if only a proper history of each case is elicited.

These people will be found to have had digestive disturbances earlier in life, at some time to have been

*Read before the St. Louis Medical Society, January 13, 1906.

more or less sore in the upper right abdomen, will probably have had attacks of colic at some time, although these may have been so mild as not to have attracted much attention, and many of them will have had typhoid fever, or other intestinal disturbances.

In other words, a keen observer should in all of these cases, if he has elicited the proper kind of a history, had his attention directed to the possibility, at least, of latent gall-stone disease.

The matter, which you will find in all the older works on general pathology, referring to gall-stones found at autopsy in patients who never presented any symptoms, is one of the absurdities which has come down to us from the time when nobody had gall-stones, who was not jaundiced.

Now for a brief history of four illustrative cases.

1. Mrs. B., 42 years of age, the mother of ten children, was operated upon April 20, 1905. She presented a history of sixteen years' abdominal trouble, colicky in character. She was an immensely fleshy woman, and was so sensitive that she could not bear any sort of physical examination of the iliac region, which was at all satisfactory. Her history was so plainly indicative of appendix disease, that the McBurney incision was made, and a very long partially adherent appendix, presenting alternate constrictions and dilations, removed. Evidently the diagnosis, so far, was correct, and she would have been sewn up without more ado, had I not followed my usual custom of running the hand up under the liver, whereupon I discovered that the gall-bladder was contracted around a large stone. Through a small incision over it, I found the cystic duct obliterated, divided it and removed the bladder intact, containing the stone. The patient made an uninterrupted recovery, and went home well.

2. Mrs. J., 34 years of age, was operated upon Sept. 27. Her symptoms, which had persisted for three years, were distinctly pelvic in character, and a bi-manual examination revealed a mass on either side of the uterus. These manifestations completely overshadowed everything else. The abdomen was opened, a large hydro-salpynx removed from the right side, an ovarian cyst, the size of an orange, taken from the left side and an adherent appendix amputated. Then thanks to the above mentioned invariable rule, when a woman's abdomen is open, the hand was thrust up under the liver, and a small gall bladder felt with a stone inside. Through a very small incision, over the gall bladder, it was removed, containing a beautiful, pure cholesterin stone. The whole procedure took less than an hour, the patient was up two weeks later, and is now as well as she ever was in her life.

3. Mrs. K., 45 years of age, was operated upon Sept. 9th, and a partial resection of the stomach for chronic ulcer was made. Following this the stomach symptoms were perfectly relieved. She could eat anything, digest it perfectly, which she had been unable to do before; but a very annoying feature of her condition had in nowise been influenced by the operation. I refer to severe paroxysms of colicky

pain in the upper right abdomen. We had noticed a few adhesions around the cystic duct when her abdomen was opened, but having on hand a task of such magnitude, we did not consider it advisable to waste any time on other organs, after resecting the stomach. However, these painful attacks became so severe, that we were compelled to re-operate, and on Sept. 30th removed a greatly distended gall bladder with a cystic duct, containing one tiny stone, and its lumen reduced to about the size of an ordinary pinhead. At the same time the appendix was removed. From this date the patient made a perfectly satisfactory recovery. I saw her a few days ago, looking perfectly well, having gained about twenty pounds in weight, and expressing herself as being entirely free from pain.

4. Mrs. A., 60 years of age, was operated upon Oct. 21st for a total prolapse. This was corrected by ventrofixation and perineorrphaphy. While the abdomen was open, I discovered a contracted gall bladder. On account of the patient's age, I refrained from further work, for the time being, but on Oct. 30th removed the gall bladder and on Nov. 9th the patient went home perfectly well.

These four cases will serve to illustrate the point at issue, namely, that such lesions are being constantly overlooked, not only in patients whose abdomens are opened for some other cause, but also in a vast number of people whose abdomens are not opened at all, but should be for this same gall-stone disease.

These illustrations serve further to show the value of making a systematic examination, of as much as possible within the abdominal cavity, whenever it is opened, and no contra-indication such as the presence of free pus is found.

While describing four cases, which illustrate obstruction of the common duct, I am to be pardoned a word on the diagnosis of this condition.

1. A patient, Mrs. W., 60 years old, who entered the hospital last Monday and was operated upon only this morning, illustrates the matter better than could be done by any amount of theoretical discussion.

To put it very simply, she is the mother of a number of children, and has had digestive disturbances for twenty years. Has had four attacks of colic in the upper right abdomen during the last three years, these being so severe as to put her to bed and require morphine. The last one came on Thanksgiving Day, since which time she has been intensely icteric, has had chills, very high temperature, much bile in the urine and is so troubled by itching, that she can hardly restrain herself from tearing at the skin constantly. I can hardly imagine a better picture of the diagnosis of stone in the common duct, although I will admit that there are instances where jaundice has not been present. I removed two stones from her common duct and 38 similar ones from the contracted gall-bladder.*

2. Mrs. S., 32 years of age, was operated upon Nov. 4, 1901. When

*Mrs. W. was up on the 6th day, her fistula closed at the end of three weeks; she went home well a few days later.

first seen she was doubled up with gall-stone colic, was extremely icteric and had a temperature running from 103 to 104 degrees. She had been a sufferer for years, was considerably emaciated, and was altogether in such a deplorable state, that I feared for the consequences of an operation. However, it was very clear that she was rapidly losing ground, so the abdomen was opened, the gall bladder, which was considerably distended, was drained and found to contain no stone, then attached to the parietal peritoneum, and the patient hastily put to bed. Apparently the gall bladder had emptied itself of the stone, which was completely obstructing the common duct, and though I was aware of this fact, I did not dare hazard the patient's life, in her present condition, by attempting more than a temporary relief of the urgent symptoms. As soon as she awoke from the anesthetic, she was seen to be completely relieved, and naturally made a speedy recovery. Of course, the fistula persisted, as might have been expected. About three months later, as the lady was starting out to spend the evening at the theatre, she suddenly dropped to the floor with a violent attack of pain, which persisted for a short time, after which bile appeared, for the first time in the stool, and the fistula at once closed. Of course, she passed her obstructing stone and in the five years which have intervened, she has had absolutely no further trouble. I saw her less than a week ago, and can vouch for the fact, that she is perfectly well.

3. Mrs. J., 53 years of age, was operated upon Aug. 26, 1905. For many years she had had stomach trouble. Two years ago she became jaundiced with colicky attacks, which came on every few weeks and lasted several days. She had every one of the classical features of a stone in the common duct. At the operation the gall bladder was found shrunken to the size of the thumb, and containing several small stones. The common duct was distended to the size of my index finger, and its walls were very thick. It was incised and a stone felt in the lower end. While manipulating this, with a view to bringing it up into the opening, it suddenly slipped down into the intestine, and the desired result was thus accomplished, although not exactly in the manner intended. The gall bladder had no connection with the cystic duct, hence it was removed; a tube was tied in the opening of the common duct, and the patient made a rapid and uneventful recovery. At first there was a little digestion of the skin around the fistula, showing the admixture of pancreatic fluid. At the end of three weeks, the fistula had closed and one week later, the patient went home. A short time ago I heard from her and she was perfectly well.

4. Mr. H., 69 years of age, was operated upon Sept. 11th. He presented very much the same chronic history of digestive trouble, with later severe colics, and recent icterus, as those evinced by the other three patients, whose histories have just preceded this one.

The night before the operation he had a temperature of 105, and went on the table an exceedingly sick

man. We had kept him in the hospital about ten days, hoping that his condition would become favorable enough to allow operation, but instead of this, he gradually went down hill, and at his age, we were afraid to wait any longer, so upon the above mentioned date, knowing full well the danger of operating but preferring to kill him, rather than to let him die, without giving him this single chance for recovery, the abdomen was opened and a shrunken gall bladder found with an immensely dilated common duct, as was expected. His condition was so alarming while on the table, that nothing further was attempted than a mere cleaning out and drainage of the gall bladder. We put him back to bed with the full knowledge that a secondary operation would be necessary, but to our surprise, simple drainage was so efficacious that the edema around the stone in the duct subsided enough to let bile pass by, and his fistula closed in three weeks. About a month later he was at work in his store, and although now seventy years of age, and carrying a stone in the common duct, which will have to come out in all probability, he is to all intents and purposes, a hale and hearty old gentleman.

These four cases last described will serve very well, I think, to illustrate this most serious phase of gall-stone disease. All of these patients might have been saved the great danger to which they were exposed, to say nothing of the years of treatment and torment which they endured, if only an earlier diagnosis had been made, while their stones were confined to the gall bladder, where a very simple surgical operation would have sufficed, instead of the extensive procedure, which is necessary after a stone has lodged in the common duct; to say nothing of the patient's unfavorable condition, at such a time.

It may be in order to say a word on the surgical treatment of gall-stone disease, and I will preface this by stating most emphatically that it is no longer considered good practice to operate in two sittings.

I have, very recently, had an opportunity of observing the surgery of our seven most progressive clinics in America and will state that I nowhere saw this done. By this method it is impossible to adequately examine the interior of the gall bladder and the ducts. In the second place it does not immediately relieve the status for which it is done, and in the third place, the anatomical condition, which is left behind, after a gall bladder has been sown to the skin, is in many instances productive of worse symptoms, than those which were occasioned by the original disease.

An operation, properly undertaken in a case where there is no obstruction of the common duct, must contemplate one of two things; drainage of the gall bladder, or its removal. It must be kept in mind that drainage is the thing of paramount importance in gall-stone disease, and certainly is this true, if there be any serious amount of infection in the billiary passages especially those of the liver. Probably a gall bladder should not be removed, as long as it contains bile, if its walls be not diseased. However, there is so much difference of opin-

ion upon this point, that it cannot be regarded as settled. Personally, in non-obstructive cases, I remove every gall bladder, the walls of which are thickened or shrunken, but I hesitate to remove the non-diseased, unless I am reasonably sure that the cystic duct is obliterated. We know that gall-stones almost never recur in a gall bladder, which has been thoroughly cleaned out. W. J. Mayo told me of one in his 1200 cases.

Now, as to the obstructive cases, I mean those where there is a stone in the common duct. Here the treatment is quite another matter, and I believe that it is radically wrong to remove a gall bladder in such an instance, which can possibly be used for drainage; I mean by this, only one into which bile flows, or may flow later, and I have seen it take a week for this to become apparent. But, the point of greater importance is, the thorough exploration of such a common duct, which can only be accomplished in about two-thirds of its length, *after* it has been cut open and the operator's finger introduced into it. Unless this has been done, nothing reliable can be stated in regard to such a duct, and the patient has been denied, practically, his only chance of permanent recovery. But, even after such a duct has been evacuated, still secondary stricture of it may occur, hence the gall bladder must be left for future drainage, which may become necessary, and furnish the patient with his only means of eliminating bile. In these cases, I am careful to follow the technic proposed by Wm. J. Mayo, which consists in leaving the duct practically open, with a fish-tail drain tied in it. This allows the bile to flow down into the gut, as well as out the drain, thus preventing particles of food from finding their way upward into the peritoneal cavity.

The best way to drain a gall bladder is by tying in it a rubber tube, wrapped with gauze and thin rubber. This can be made water-tight and thus is obviated the necessity of attaching the bladder to the parieties, with its undesirable consequences.

It seems to me there is no pathologic condition which makes more urgent demands upon the surgeon, and requires better surgery than does this matter of gall-stone disease.

As soon as the abdomen is opened, there must be an immediate decision as to which one of several lines of treatment is to be pursued; something possible only to one of wide experience in this disease; nor is this the only requirement. I know of no more difficult technical problem, than the rapid and safe treatment of these rather minute viscera, after widespread pathologic changes have taken place.

As a final plea for advancement in this line of surgery, it is certainly not too much to beg that my first class of cases, which have been overlooked altogether in the past, may not in the future be allowed to attain the gravity of my second class, those in which the common duct is obstructed.

DISCUSSION.

Dr. Jesse S. Myer said that as a medical man he is as reluctant to yield ground to the surgeon as medi-

cal men usually are, but he had come to consider gall-stones strictly a surgical disease. After the diagnosis of gall-stones is made the case should be turned over to the surgeon. He had seen a large number of cases of gall-stone disease that had been persistently treated by physicians on account of the stomach trouble and these patients were only relieved after gall-stones were removed. He did not agree with Dr. Bartlett as to the ease of the diagnosis in these cases. He had seen cases in which the symptoms were strictly gastric, no pain in the right hypochondriac region and nothing to lead to the diagnosis of gall-stones but the persistent gastric symptoms that did not yield to treatment. When one meets with a case of stomach trouble in a person forty to fifty years of age and can find no reason for the existence of the symptoms either in a disturbance of the secretions or the motility of the stomach, gall-stones should at least be suspected. In the diagnosis too great weight is apt to be given to jaundice. As to the reformation of gall-stones, the etiological factors which produced the first batch of stones might produce a second batch. Among the etiological factors may be mentioned disturbance in the intestinal tract, especially ulcerations, as in typhoid fever, or relaxation of the abdominal walls leading to a stagnation of bile, etc. Cushing had reported a case where typhoid germs were found in the gall bladder years after an attack of typhoid fever and typhoid bacilli were found in the gall bladder. In making the diagnosis then, there should always be taken into consideration the previous history, especially with reference to typhoid fever. About 90 per cent. of the cases occurred in women and a majority of the other 10 per cent. in old men who had at one time been fleshy, and in whom there existed this condition of relaxation of the abdominal walls. For the proper flow of the bile there must be a counter pressure with each respiratory movement, hence any disease that would lead to muscular relaxation would result in a stagnation of bile, which in turn may result in a cholecystitis, leading to the formation of gall-stones. The cholesterin stone presented by Dr. Bartlett was probably two-thirds cholesterin, while the brown portion was probably bilirubin.

Dr. V. P. Blair called attention to one symptom, namely the cramp that followed the taking of a small amount of food, that cramp being relieved some time afterward with the passage of gas. He had, however, seen the same symptom in a case of pyloric obstruction. He also directed attention to a useful surgical expedient practiced where there was a doubt between gall bladder disease and appendicitis in women who had borne children and who had loose abdominal walls. A small window admitting two fingers could be made at a point corresponding to the site of the appendix and through this incision, owing to the mobility of the abdominal walls, the appendix and the gall bladder could both be examined.

Dr. Bartlett, in closing, thought that what he had said about the diagnosis had been universally misunderstood, except as to the ease of

diagnosing stones in the common duct in the presence of the classical symptoms. Keeping in mind those facts, it was a simple matter to make the diagnosis; but the diagnosis of gall-stone disease in the abstract was not a simple thing by any means. He agreed with Dr. Brown that it would be very bad practice to make such an examination for stones in every case; he had simply had reference to those cases in which it was feasible.

USE AND ABUSE OF MASSAGE IN THE TREATMENT OF RHEUMATISM.*

By T. N. Bogart, M. D., Excelsior Springs, Mo.

In the application of massage in the treatment of rheumatism, I wish to say it is not my purpose to condemn the manipulator of the masseur, for we recognize scientific massage as one of the best treatments of rheumatism when followed out properly and at the proper time.

Massage, or systematic rubbing and manipulation of the tissues of the body, is one of the oldest means employed in the treatment of disease, dating back as far as 3000 years B. C., and was used by the Chinese of that date. This art has been used by all nations more or less from that date down to the present time for treatment of disease, associated with more or less medical treatment; but however at the present age from some unknown cause it has been singled out as a science of its own, and is applied in the treatment of all diseases, regardless of the science of medicine. We now have schools that teach this one art as a science, and use it in every form of disease, and at the same time condemn all other forms of treatment. It especially lays stress on the fact that it is a specific in the treatment of rheumatism; I am frank to say that I use massage myself in the treatment of some of my cases, but don't use it at the expense of everything else; for I recognize and believe massage to be only one remedy to be employed in the treatment of disease, and that it occupies a place in the treatment of rheumatism as does the salicylates and it is an art belonging to the practice of medicine, no more able to stand alone when divorced from anti-rheumatic remedies than quinine, electricity in its different forms, or bathing, if tried by themselves and alone. The science of medicine is too broad and deep for us to pick up any one remedy and rely on it as a specific for any one disease. Imagine if you will, a doctor going through life clothed in the mantle of a medical man with only one idea, and that of massage; pushing it through the world as a King Cure-All, a science

*Read at the annual meeting of the Missouri State Medical Association, Excelsior Springs, May, 1905.

by itself, independent of everything else; such a thing is too narrow for the medical profession. Rheumatism with all of its complications is entitled to more consideration than the one-remedy treatment, for at the best it resists treatment more strongly than any other disease I know of, from the fact that the causes for its existence are so variable, and the fact it is to be cured by using remedies and means for the purpose of ridding the system of the poison by elimination, would discredit the theory that it can be cured by massage alone.

Rheumatism in its early stages should never be treated by massage, for three reasons: First, the manipulations have a direct tendency to increase the hyperemia and inflammation in the affected parts; second, massage will elevate the temperature and increase the liability to organic heart trouble, which often follows even the mildest rheumatic cases; this point should always be guarded by medical means; third, pain, which is always an aggravating factor, is not only increased by manipulation, even by the most scientific masseur, but the patient is left in a weakened condition and the liability of an attack of rheumatic fever is greatly increased, which is always the foundation for the so-called rheumatic heart. Now if you have a localized affection of say, one joint, where there is a tendency to stiffness or ankylosis, massage of a light stimulating character can be given, at the same time exercising great care not to increase the pain or set up additional inflammation, but to increase the blood supply to the parts to such a degree as to arrest adhesions of the tissues in this particular locality, your massage is useful, but if too violent it is always a detriment, even in this form of cases.

In cases of chronic rheumatism of a traumatic or uric-acid character where there is ankylosis associated with adhesions of the tissues, massage if given properly, is always beneficial, as it seems to set up a slight localized inflammatory condition which promotes absorption of the adhesions, especially those involving the soft structures. Then if passive motion is employed at regular intervals the joint will always improve; but even this form of massage can and is often abused by being given too often and too violent.

No one is competent to treat any case of rheumatism until expert enough in diagnosis to recognize the difference between rheumatism, tuberculous joints, and septic neuritis.

Gonorrheal rheumatism is one of the most obstinate forms of this disease, yet the massage treatment is often given promiscuously in these cases until the patient rebels and refuses to take it longer; they should never be treated by massage on account of the acuteness of pain at different stages of the disease, and the susceptibility of relapse if manipulations are too violent. I find this form of cases yield very slowly even to the very best form of medical treatment together with the hot baths and every other form of palliative means; yet the masseur persists in giving massage to this class of cases until the patient is absolutely so sore and stiff that he can not get

on the table; he has been led to believe by the manipulator that it is necessary to arouse all of this pain and soreness before convalescence can begin to establish itself.

A patient is often led to believe he is being relieved of rheumatism, especially just after taking a massage, on account of his being able to move about more freely just after treatment; this is the case with most patients as the manipulations seem to relieve the stiffness for a short time; especially is this true in rheumatic lumbago. But the belief is only temporary as the pain returns as bad as before, associated with increased stiffness and soreness, which add fuel to the fire by increasing the flow of blood to an already inflamed area. Very often injury is done to the kidneys on account of their susceptibility to inflammation especially when there is a rheumatic condition existing, no matter what may have been the cause of the rheumatism.

My experience with the masseur and his methods of treatment, has led me to believe not only that he often does great harm by manipulation in the different forms of rheumatism, but I find him to be a very poor diagnostician; for no matter what the disease may be, the massage treatment is always given if the patient will stand for it.

I believe that massage is useful in the treatment of rheumatism, and that it will always find strong advocates among the rank and file of the medical profession in the treatment of various forms of disease; but still I think more good could be accomplished if a correct diagnosis was always made and the treatment given under the direction of a competent physician.

DISCUSSION.

Dr. John D. Seba. Bland: Rheumatism is always very interesting, especially to those of us who are drawing a pension on account of it and some of the rest of us might be willing to have a little rheumatism if that would carry with it a pension. Its etiology is always interesting. The majority of diseases we have to catch, but we don't have to catch this, we breed it in ourselves. First, there is the uric acid diathesis, and there is the absorption from the alimentary tract of toxines producing both muscular and inflammatory rheumatism. If those cases of inflammatory rheumatism are not handled with care and enthusiasm, the patients are likely to go to an early grave. We hear a good deal about the limitation of rest and the question of massage and when and how it should be performed. As long as you have a swollen and inflammed joint be careful how you handle it. After the acute inflammatory symptoms have passed massage is the thing.

Dr. Bogart, in closing: It was not my intention when I wrote this paper to give publicity to any art or science; but here in Excelsior Springs we have every kind of "ism" that can be represented for the treatment of disease; especially the masseur, manipulator or osteopath, they are all clamoring to treat the sick; hence it was my intention to give the impression that you could get just as good service from the masseur, and even better, than you could get from the osteopath; for the former will follow the instructions of the physician, while the latter will not.

Journal Missouri State Medical Association

The Official Organ of the State Association and Affiliated County Societies.
Published Monthly under the supervision of the Publishing Committee

ADDRESS ALL COMMUNICATIONS TO 534 NORTH VANDEVENTER AVENUE, ST. LOUIS.

Volume II. MARCH, 1906. Number 9

C. M. NICHOLSON, M. D., Editor
E. J. GOODWIN, M. D., Associate Editor

Publication Committee
C. M. NICHOLSON. F. J. LUTZ. B. M. HYPES
WALTER B. DORSETT.

EDITORIAL.

OBSCENE NEWSPAPER ADVERTISEMENTS.

Some time ago the St. Louis Medical Society through attorney I. V. Barth had information issued for violation of Section 1447 of the revised statutes against "Drs." King, Meyer, Duff and Whittier, the causes being returnable on the 7th day of November, 1905, before Judge Daniel O. C. Tracy, of the First District Police Court. The cases being continued until November 17th, it was in the meantime agreed that the case against Drs. Meyers and Duff be continued generally and bide the result of the King case. Dr. Whittier did not care to accept the contingency of the King case's resulting adversely to his interests so he agreed in writing to advertise only within certain limits prescribed, in consideration for which his case was dismissed for want of prosecution.

Oral arguments were made and written briefs filed. Without entering into a detailed consideration of the legal features involved it may be said only that the defense rested entirely upon the contention that the ordinance was unconstitutional and beyond the regulative powers of the municipal assembly. The advertisement was admitted to have come within the prohibition of the section and the case resolved itself into a question of law solely. On December 1st, Judge Tracy handed down a most able and exhaustive written opinion in which he held the ordinance constitutional and fined the defendant fifty dollars and costs. The defendant immediately took appeal to the Court of Criminal Correction wherein presides Judge Hiram Moore. On January 4th of this year an agreed statement of facts was here filed as in the Court below and on the 6th, following, oral arguments were made and briefs again submitted upon the points of law involved. The matter was taken under advisement and on January 27th judgment was again entered in favor of the City. Immediately after certain legal steps were taken, an appeal was perfected by the defendant to the Supreme Court of the State. Pending the appeal exhaustive briefs must be prepared by counsel and the matter be brought into proper shape for being presented in printed form to the Su-

preme Court. No case has thus far been found either in this or other jurisdictions precisely in point and there is, therefore, a rich field for legal speculation. It is to be hoped that the highest tribunal of our state will find the reason of the law in favor of the constitutionality of the ordinance in question.

It seems clear that by the terms of the ordinance not one line of this obscene advertising could be published without the publisher's being liable to a prosecution under the ordinance. The publisher is as culpable as is the physician who prostitutes his profession.

It may be said here, however, that the ordinance does not nor could it constitutionally prohibit all advertising by physicians or by those who offer cures for various ills. There is nothing which in any way prevents a doctor from advertising his specialty with the greatest eclat so long as he confines himself within the limitations of the ordinance. We may only enforce the law as we find it—but enforcement in this instance means at least a relief to a great extent.

With reference to the proposed proceedings for the ouster of medical companies engaged in the practice of medicine in this state from the exercise of their corporate franchises. It has become most common of late for irresponsible physicians and dentists, with or without licences, to organize in corporate form for the purpose of practicing medicine, surgery and dentistry. Here are perpetrated the vilest outrages which the medical profession knows. The evils of quackery reach their height in this corporate guise. They use the corporation as a shield to protect them from the more stringent supervision of the state board of health and of the state dental board. These state boards may regulate the individual practitioner but they are powerless in dealing with the corporation as such. They may revoke the license of the single individual for unprofessional conduct but they cannot take away the license of a corporation. The franchise to be and act as a corporation is derived from the state and is not subject to revocation at the hands of any individual or set of individuals. Thus it happens that the corporation, a body which owes its very existence to the law, becomes in turn the most effective medium of these practitioners for the purpose of evading the law. But it is believed that the situation is one that may be reached through the courts. The purpose is to oust them from the exercise of corporate rights. If there is no authority in law by which they could obtain their franchise from the state, then the exercise of their corporate rights, *ipso facto*, becomes illegal. These companies, incorporated in many cases for the practice of medicine, surgery or dentistry, must derive their existence, if anywhere, from the article authorizing the incorporation of manufacturing and business companies. It will be contended against them that the practice of medicine, surgery or dentistry is in no sense a manufactory or business—certainly not within the meaning of that article of our statute. And even though within the meaning of the article, it would be yet far from conclusive that they could resist proceedings in view of

the fact that their corporate character is used to aid them in evading the laws adopted with reference to the state board, as indicated above.

There is a second class of such corporations, which seek an escape from what must be their inevitable contention, that the practice of medicine and surgery or dentistry is a business within the meaning of article 9 of the Revised Statutes of Missouri, 1899, by incorporating for the avowed purpose of owning, operating and controlling hospitals, sanitariums or retreats wherein they may care for and treat patients who may apply. Here there is involved an issue of facts whether or not in receiving the patients to their office rooms they are in reality conducting "hospitals, sanitariums or retreats."

Both classes may be reached by what are known as proceedings "quo warranto." These are brought in the name of the prosecuting official —in more important cases in the name of the Attorney General of the state—and have as their object the forfeiture of the corporate franchise. Such proceedings involving a revocation of a right solemnly granted by the state are necessarily of the highest importance and may be brought immediately in the Supreme Court. The Attorney General will not lend his name to the proceedings unless the best interests of the state demand it. To the end that the matter might be placed before our Attorney General or his department and the writ be caused to issue upon his information the society authorized Mr. Barth to go to Jefferson City and confer with the department. As a result of that conference, which was most satisfactory, the JOURNAL is assured that it is safe to say that upon recommendations issued by the state board of health setting forth the present evils surrounding the practice of medicine and surgery in corporate form, proceedings in the name of the Attorney General could be promptly instituted. The records in the department of state at Jefferson City show a list of about a hundred and seventy-five medical corporations engaged in business in this state. Many of these, of course, are *bona fide*, yet a large percentage, upon a close examination of their articles of corporation, was found to fall within the classes referred to. Two and possibly three suits should be instituted in the Supreme Court. The quack has been allowed to flourish unmolested through the tolerance and indifference of the reputable physicians and the prosecutor.

THE CITY HOSPITAL.

At last the medical profession of St. Louis has been aroused to the necessity of changing the method of conducting the City Hospital. It is not the intention to criticise the superintendent nor his assistants either present or past, but to lay stress on the advisability of changing the method of administration which can only be changed by an amendment to the city charter. As before stated editorially in these columns, the institution should be under the jurisdiction of medical men appointed by trustees. The superintendent should be a layman who should be the executive head of the hospital. The directors or trustees of the hospital should appoint a

house surgeon, who would be an assistant to the superintendent; and a visiting staff consisting of surgeons, internists, gynecologists, neurologists, obstetricians, laryngologists, dermatologists, oculists, otologists, pediatrists, pathologists, and dentists, each for a period of six months or one year. The internes should be selected by competitive examination held by the visiting staff. This would secure for the pauper sick of our city the best medical treatment; for the undergraduate students the greatest possible advantage in clinical medicine; and for the medical profession the opportunity of dealing with a number of interesting cases which otherwise might escape notice. At the meeting of February 3rd the St. Louis Medical Society adopted the following in amendment of Section 5, Article XII, of the City Charter:

"Section 1. There is hereby created a hospital and out-patient department of the City of St. Louis, which shall be managed, directed and controlled, as provided by this charter and by the ordinances of the City of St. Louis, by a Board of Trustees, as hereinafter provided, whose members shall possess the same qualifications as the mayor, and shall give bond in such sum as may be ordained by the Assembly, with sufficient sureties for the faithful performance of duty.

Section 2. The control of said Board of Trustees shall be exercised over the City Hospital and Associated Dispensaries, the Female Hospital, the Quarantine Hospital, the Insane Asylum and the Poor House, as now existing, and be extended to branches that may from time to time be established, or like institutions that may be created.

Section 3. Said Board of Trustees shall consist of six residents of the City of St. Louis of recognized capacity and fitness, together with the mayor, ex-officio. The members of said Board of Trustees shall be elected on a general ticket and by the qualified voters of the City of St. Louis. The terms of office of said trustees, so elected, shall be six years, except that those first elected shall be classified by lot, so that their terms shall expire two in two years, two in four years, and two in six years, respectively. All vacancies from any cause, shall be filled by the mayor until the next succeeding election. Said Trustees shall receive no pecuniary compensation or be interested directly or indirectly in the furnishing or performing of work, labor or services, materials or supplies of any kind to or for said hospitals, by contracts or otherwise. No Trustee shall hold any office of emolument under the city, state or national government, except the office of notary public.

Section 4. Any trustee may be removed by due legal procedure as prescribed by the city ordinances for removal of municipal officers upon proof of official misconduct or neglect of duty, or for mental or physical disability.

Section 5. Said Board of Trustees shall organize as soon as practicable after said trustees are elected. It shall biennially choose from its members, at a regular meeting to be held in the month of....., a president and other officers for the terms of two years. It shall select and employ a competent salaried sec-

retary. It shall establish rules and regulations for the administration and government of said institutions, subject to general and specific legislation. Said Board shall have the power to appoint and remove such superintendents, medical officers, subordinate officers, and other employees, as may be necessary for the efficient management and conduct of said institutions. The Board shall keep accurate and detailed accounts, in a form approved by the comptroller, of all moneys received and expended by it, detailing sources and purposes. It shall, during the month of..... in each year, transmit to the mayor a report of the condition of the institutions under its care and management.

Section 6. Said Board shall appoint a medical staff, representative, as far as feasible, of the several schools of medical practice, for each and every institution under its control. The staff shall consist of attending and consulting physicians and surgeons, who shall serve, as directed by the Board, without pecuniary compensation, and shall hold office so long as they shall perform their duties in a manner satisfactory to the said Board of Trustees. This medical staff shall be made up of residents of the City of St. Louis, members of the profession and of respectable character and of good standing and of recognized ability. They shall deliver clinical lectures and devise methods of bedside teaching. Vacancies occurring in said staff shall be filled by the said Board of Trustees.

The said medical staff shall be advisory to the Board of Trustees in all matters pertaining to the fullest accomplishment of the humane purposes of the named institutions. All appointments for medical and surgical house-officers, of said institutions and out-patient departments, shall be made by the Board of Trustees only on nomination by the said medical staff, after competitive examinations conducted by said staff.

Section 7. Said Board shall annually, at a regular meeting in the month of ....., elect by ballot a superintendent for each of the named institutions. The duties of the superintendent shall be prescribed by the Board and shall be of a general administrative and executive but non-medical character."

It is believed every medical body in St. Louis will adopt the proposed amendments, and by the concerted effort of the medical profession there is little doubt but that the amendment will become a law.

SOME OBSTETRICAL METHODS PRACTISED IN THE PHILIPPINES.

The popular belief that the child-bearing women of barbarous and semi-civilized peoples escape many of the pangs their civilized sisters undergo, would receive quite a set-back were a careful investigation made. For a period of more than fourteen months, I was a resident of an island town in the province of Rizal, on the island of Luzon, Philippine Islands, and during that time had leisure to devote to the careful study of obstetrical methods in

vogue there. As a result of my observations there I was able to convince myself that the so-called ease and safety with which the semi-barbarous peoples of the Philippine Islands were supposed to pass through the period of labor could be replaced in reality by tortures and the process could be followed by serious and far-reaching consequences. From the start the crude, interesting methods resorted to during the confinement of a native woman furnished food for considerable reflection. No attention was paid to any sanitary conditions of the patient or of the surroundings. The patient, clad in the scanty garments worn by native women in the Philippine Islands, was placed upon a mat on the floor of the main room of the hut. The entire family, children, dogs, and those neighbors who could spare the time, ranged themselves, male and female, around the room in order to be present on this auspicious occasion. One slight tribute to the modesty of the woman in question was observed in the fact that her limbs were draped in her somewhat scanty garments. As soon as the first real pains manifested themselves and locomotion was somewhat impeded, the patient assumed the recumbent position, and a large broad piece of cotton or linen cloth was passed around the abdomen and the ends passed under the lumbar region and hips. These ends being seized by four persons, two at each end of the cloth, and the persons being seated on the ground, with their bare feet pressed firmly against the body of the patient, made strong traction on the cloth so as to tighten it over the abdomen, increasing the pressure as required to assist the pains of expulsion. The bag of water if not already ruptured, very soon broke under this method of procedure and as soon as any portion of the child presented it was immediately seized by a fifth assistant and traction made, in a more or less vigorous manner, in order to draw it forth regardless of consequences. Should any delay, natural under the circumstances, be occasioned, further aid was given in a more forcible manner by placing a plank about six or eight feet long by a foot wide and of suitable thickness, transversely across the abdomen of the patient and upon this plank a native man or woman, mounted barefoot. Slowly, but with considerable force, this assistant then raised himself on his toes and allowed the heels to descend forcibly on the board. The process was repeated for a considerable time, the first four assistants meanwhile tugging manfully at the cloth around the lower portion of the body. This last auxilliary process, viz., the plank with its superimposed weight, was usually effectual except in breech presentations, in which case a crude attempt was made at version, the hands of the assistant performing this important service being seldom in a proper sanitary condition to recommend them for such work. Few cases in which these various methods were used were free from laceration of either cervix or perineum, or both; and in some cases noted there was sufficient violence employed to cause rupture of the uterus and fatal results. The birth of the child was followed by the expulsion of the

placenta by the above means, and, should the process be delayed, forcible traction on the umbilical cord was made to such an extent as to tear away portions of the placenta, and often large sections of this body were left to find their way from the uterine cavity of their own accord. Weeks and even months later the results of such practice were noticed in the septic conditions which would naturally follow retention of the membranes. After the birth of the child the umbilical cord was severed by a blow from the bolo, a knife like a machete, carried by nearly every native man in the interior of the islands, and the end nearest the child was knotted. This was further reduced in length after the mother had bathed both the child and herself in the nearby stream, or well, which ablution was usually performed within an hour after the birth, and the newly made mother then proceeded to take up her usual avocations, temporarily postponed by the above interesting event. Notwithstanding these crude and somewhat violent methods employed to hasten the birth of a child, some few women and their offspring managed to escape without serious injury, and some even went through their confinement without the resort to artificial means. As there were no records extant from which any data concerning these cases could be obtained, careful notes were taken in one hundred and five cases to which it was possible to obtain access, and the result showed somewhat startling facts. Three were cases of twins. In two of these the mothers were uninjured and the children were safely delivered. In the third case, the woman was the daughter of the presidente or head man of the town; after one child had been delivered dead and with a broken arm, the presidente mercifully interfered and put a stop to the brutal methods employed and sought the aid of the medical officer on duty with the American forces in the town; through the efforts of this man the second child was safely delivered. Almost superhuman efforts were necessary to secure proper sanitary surrounding and to enforce antiseptic methods, in consequence of the modesty which native women seem to regard as necessary in their dealings with persons of another race. This added to the many difficulties a medical man meets when called to attend native women. It is seldom that a medical man is called upon in obstetrical cases until native methods have been used and the patient's condition has become so grave as to force even a Filipino to recognize the inutility of any further torture. Extensive laceration of both perineum and cervix was noted in thirty-eight cases where it was possible to secure the proper examination and six of these were further complicated by prolapsus uteri. Prolapsus uteri and inversion were noted in two cases which resulted fatally from hemorrhage and septicemia. In four cases toleration of the condition of inversion appeared to exist, and the uterus became reconciled to its new conditions, its position, and surroundings, and the patients, on an examination about twelve months later, had apparently recovered perfect health. Inversion in these four cases was the result of traction from below, exerted

in removing the placenta by forcible traction on the umbilical cord, and of the abdominal pressure from the plank with its superimposed weight. Metritis and endometritis existed in all of the thirty-eight cases examined. Five of these were traced directly to a gonorrhea, and two to venereal excess in newly married women, and which the rougher handling during the process of parturition aggravated. One case was of syphilitic origin. It may not be out of place to state that the venereal diseases met with in such great numbers in Manila and other seaport towns of the Philippine Islands are comparatively rare in island towns where communication with the outside world is difficult and infrequent. Much venereal trouble has followed in the wake of the Spanish, Filipino, and American armies which have traversed the islands, while isolated towns and villages have escaped. One case of an imperforate hymen was noted in a girl fifteen years of age, a native of a small mountain village about twelve miles from the town of Morong, Rizal Province, in which town I was stationed. The history of this case was as follows: the patient had never menstruated, though the native women frequently began as early as ten years of age; for more than two years every other month there had been intense pain over the left ovary and the uterus, lasting about four or five days; no flow was noted at any time, and during such paroxysms intense pain also existed over the bladder, accompanied by frequent micturition. This condition would cease for a period of nearly two months and then increase again, the interval between the paroxysms being only marked by tenderness on pressure over the uterus and left ovary, and also by a noticeable increase in the size of the lower part of the abdomen. The girl was an unusually well developed and muscular one for her age and race, and was engaged in the usual agricultural pursuits of her family, which necessitated the carrying of heavy burdens on the head for long distances and hard manual labor. The attack, for which the attention of the medical man was required, was of greater violence than usual and overcome the prejudices of her family regarding medical attendance. She was brought on a litter from her home to the town and the medical man called upon to render her assistance in what the family fully believed to be a case of labor and for which the crude, interesting but ineffectual methods, (ineffectual in this case) mentioned above as being the usual method of procedure, had been resorted to. Examination of the patient showed great enlargement of the lower part of the abdomen, a largely distended bladder, enlarged and tender uterus, and the presentation of what resembled a bag of water. The patient emitted the characteristic cries of one in labor as the pains attacked her at brief intervals. Examination of the vagina, which was entirely filled with the protruding mass, showed it perfectly dry. The membrane covering the mass felt hard, tense, and resisting, and was only slightly moved by the pains. The muscles of the abdomen were bruised by the use of the plank and its weight and by the tight cloth that had been ap-

plied in the early stages by the native assistants. The catheter was passed and the urine drawn to the quantity of over sixteen ounces, and relief was almost instantaneous, but no difference was noted in the size of the mass projecting into the vagina. Within an hour, the pains having begun again with increased violence and the attack having lasted for more than five days prior to the patient being brought in to me for treatment, the urine was drawn the parts below were carefully prepared for operation, and an incision three inches in length was made in the membrane presenting. Immediately two quarts and four ounces of thick, offensive, menstrual blood was discharged through the orifice and the pains instantly subsided leaving only a slight abdominal tenderness. The membrane, through which the incision was made, was found to be an imperforate hymen nearly three-fifths of an inch in thickness over its entire surface, both in the center and at its attachment on the sides. For twenty-four hours a hot vaginal douche of a saline solution was administered every three hours, and on the second day, following the one on which the operation was performed the patient walked home. Repeated examinations made monthly showed no further trouble, and regular and painless menstruation followed. In the remaining seventeen cases displacement of the uterus was noted in nearly every case, and in all there was found on later examinations a chronic endometritis with all the accompaniments of leucorrhea, metrorrhagia, menorrhagia, dysmenorrhea, tendency to abortion, which tendency was further aided in many cases by the use of certain herbs and even large needles in imitation of their so-called civilized white sisters. In a climate where all mucous membranes have a tendency to congestion it is not an unusual thing to find even the native women menstruating two or three times in the course of a month, while the white woman, a resident of the islands for any protracted period, will find her menstrual flow greatly increased in quantity, and the frequency also may be such as to call for the relief of bracing cold of a northern winter. Anemia, with its characteristic train of symptoms, is the leading symptom in the hemorrhagic type of endometritis, which there attacks native and white women alike. The life of the native Filipino woman is comparatively short, due to her many pregnancies, much manual labor, insufficient food, and most of all to the crude, brutal, and ignorant practices which bring to her a suffering equally as great as that borne by her white sister.

(Wm. Duffield Bell, Med. Rec., Jan. 27, 1906).

ERROR.

In our February issue an editorial entitled "Proprietary Medicines, Nostrums and Secret Synthetics" was by error credited to the *New York Medical Journal.* It should have been credited to the *New York State Journal of Medicine.*

CEDAR COUNTY.

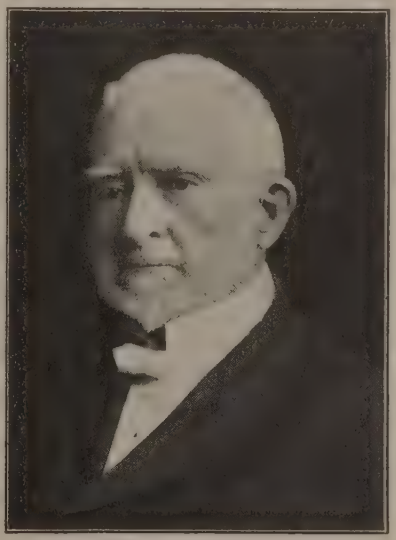
The latest addition to the list of affiliated county societies was organized last month at El Dorado

Springs. The following are the officers and members of the Cedar County Medical Society: President, Kimball Hill; vice president, R. O. Crawford; secretary, J. W. Dawson; board of censors, R. O. Crawford, A. E. Alder, E. H. Liston. Members, Kimball Hill, El Dorado Springs; R. O. Crawford, El Dorado Springs; J. W. Dawson, El Dorado Springs; R. B. Marr, Filley; A. E. Alder, Cane Hill; E. H. Liston, Balm; T. B. Younger, Stockton.

THE INTERSTATE MEDICAL JOURNAL.

The January number of the *Interstate Medical Journal* gives a comprehensive review of the progress of medicine and surgery during the past year, the department editors giving an epitome of the work, at home and abroad, in their special departments of medicine. It brings before us the great and wonderful progress that this science has made, and emphasizes the statement made in a recent address that progressive medicine never hurries, never lags, never rests, because there is no rest in science. This "review" also brings before us the great amount of research work which is being done by various members of the profession, much of which is done or directed by the men having the largest practice; this has done much towards removing medicine from the empirical to the practical. It also proves that the progressive men in our profession are men of the highest educational and scientific attainment and that the physician who hopes to make the real success dares not stop short of the best possible preparation. "Progressive medicine depends largely on the progressive doctor, and the key note of progress is preparation." This edition of the *Interstate Medical Journal* is essentially a review of reviews well worth perusal by the profession.

OBITUARY.



Dr. Elisha Hall Gregory died Sunday, February 11th, 1906, at Ormond, Florida, at the age of 81 years. He was born in Logan County, Kentucky, on the 10th of September, 1824, the son of Charles Gregory and Sophia Pleasants (Hall) Gregory, both natives of Fredericksburg, Virginia, who emigrated to Kentucky in 1820, and to Missouri in 1833, locating in the latter State at Boonville, at which place Dr. Gregory grew up, gained his education and finally studied medicine with Dr. F. W. C. Thom-

as, a man for whom Dr. Gregory expressed the highest esteem, considering him possessed of much culture and general ability. His first opportunities for observation, experience and practice in medicine were had in April, 1844, while living with the family of John Jameson, in Morgan County, Missouri, of whom the doctor speaks as having been a most excellent man, a plain farmer, and says that his memory is deeply impressed with the simplicity and uprightness, in general, of the family, long since dissolved, for, having returned to the spot after forty years of absence, he found them all gone. Dr. Gregory came to St. Louis in 1848 and began practice here in 1849, having been engaged entirely in the work of medicine ever since, as practitioner and teacher. His coming to St. Louis was a wise move on his part, the field being especially adapted to him and giving him the necessary stimulus to develop his great abilities. Almost from the beginning, he took first place as a member of the medical profession of St. Louis and as a citizen. He had the sterling, honest, earnest, conscientious qualities which win places for men. As a practitioner of medicine and surgery he has been eminently successful, and as a teacher of anatomy and surgery for close on to fifty years no one has surpassed him. Few have had the satisfaction of listening to more impressive lectures or of facing a teacher whose every element was more successful in imparting knowledge. Indeed, as a teacher, earnestness and honesty of purpose, and a desire to teach the right thing in a manner to impress the pupil with proper knowledge and an appreciation of his obligations, seemed to be the controlling thought in his mind. As an evidence of his general culture and eminence as a citizen and physician, the St. Louis University some years ago honored him with the degree of LL. D., a great honor worthily bestowed. After having achieved the greatest eminence of his profession and in the community of his own city and state; having received general public and professional recognition; and having served as member of the board of health of the City of St. Louis, president of the state board of health of Missouri; president of the St. Louis Surgical Society; twice president of the St. Louis Medical Society, and as president of the State Medical Association of Missouri, he was in 1886, elected president of the American Medical Association. For more than half a century he served as a professor of surgery and anatomy in the St. Louis Medical College, which was formerly the medical department of the St. Louis University, and later the medical department of Washington University. Dr. Gregory, in private conversation, expressed his true sentiments when he said: "My greatest pride is that all the honors which I have held have been bestowed upon me by my profession." He was married on the 15th of April, 1845, to Miss Jael Smallwood, of a Maryland family, a native of Cooper County, Missouri. Twelve children were born to Dr. and Mrs. Gregory, of whom seven survive him.

FORTY-NINTH ANNUAL MEETING
of the
MISSOURI STATE MEDICAL ASSOCIATION.

Jefferson City, May 15, 16, 17, 1906.

PRELIMINARY PROGRAM.

Allen, T. C., Bernie, Malaria; Allison, Nathaniel, St. Louis, The Relative Value of Surgical Procedures for the Relief of Paralysis Following Anterior Poliomyelitis; Allen, J. M., Liberty, The Importance of the Sigmoid Flexure in the Production of Enteroptosis, Pelvic Displacement and Reflex Phenomena; Adams, J. Q., Belleview; Ball, J. M., St. Louis, Some Recent Advance in Ophthalmology; Barclay, R., St. Louis, A Method of Radical Relief of Cases of Deafness Long Abandoned as Hopeless, Illustrated by Reports from Actual Practice; Bartlett, W., St. Louis, Lessons to be Drawn from Recent Operations on the Stomach; Brown, Tinsley, Hamilton, Arteriosclerosis; Baker, J. H. P., Salisbury; Brummall, J. D., Salisbury, Infantile Intussusception from the Country Practitioner's Standpoint; Broome, G. Wiley, St. Louis, Limitations of Surgical Procedures in Cancer; Campbell O. B., St. Joseph, Ectopic Pregnancy; Claussen, J. J., Kansas City, Epithelioma of the Lip; Chastain, E. N., Butler; Child, Scott, P., Kansas City, The Nervous System of the Child; Cordier, A. H., Kansas City, Non-Lithogenous Obstructions of the Biliary Ducts; Crossen, H. S., St. Louis, Some Questions Concerning the Treatment of Uterine Fibromyomata; Dalton, H. C., St. Louis, Abdominal Injuries; Davis, T. O., Maitland, Broncho-Pneumonia; Davis, E. P., Woodruff, Typhoid Fever; Dorsett, W. B., St. Louis, An Unusual Retroperitoneal Tumor in the Mesocolon Simulating a Fibroid of the Uterus; Edmonson, M. M., Kansas City, Some Remarks on the Treatment of Chronic Joint Disease; Elam, W. T., St. Joseph, Supra-Pubic Cystotomy as Preliminary to and as a Route for the Performance of a Considerable Number of Prostatectomies; Forster, Davis, St. Louis, Ovarian Function; Frankenburger, J. M., Kansas City, Rectal Abscesses; Frick, W., Kansas City, The Therapeutics of Eczema; Geiger, C. G., St. Joseph, Appendicitis; Gray, A. L., St. Joseph, the Use and Abuse of the Obstetrical Forceps; Greene-Wilson, Dora, Kansas City, The Present Status of Psychotherapy; Hertzler, A. E., Kansas City, The Treatment of Retroflexion of the Uterus; Hill, Roland, St. Louis, Obstructions of Small Intestines from Chronic Disease, with Report of Cases; Jarard, H., Pleasant Hill, The White Plague; Jurgens, H., Edina, Sup-

puration of the Superior Maxillary Sinus with Involvement of Ethmoidal Cells and Sphenoidal Sinuses; Kirchner, C. G., St. Louis, Surgical Aspects of Typhoid Fever; Lewis, C. O., Fayette, Albuminuretica; Lockwood, T. F., Butler, Criminal Abortion, a Prevailing Evil Against the Unborn Generation; a National Crime Committed for Mere Social Promotions; Mark, E. G., Kansas City, Pyuria; Matthews, F. H., Liberty, Mucous Colitis; McGinnis, H. F., Higginsville, Illegal Practice in Medicine; Miller, Sherman, Maysburg; Mitchell, C. M., Blythesdale, State Medicine; Morrow, C. J., Kansas City, Syphilis of the Nervous System; Mussen, E. H., Rockingham, Ear-tire as a Factor in Disease; Norman, J. B., California, Intestinal Auto-Intoxication; Potter, T. E., St. Joseph, Tuberculous Disease of Joints; Pearse, Herman E., Kansas City, A Method of Operating in Inguinal and Femoral Hernia When Complicated by Abscesses; Robinson, Ernest F., Kansas City, Gas Bacillus Infection; The Clinical Results of the Development in the Tissues of the Bacillus Aerogenes Capsulatus; Rothwell, J. H., Liberty; Sanders, St. Elmo, Kansas City, Surgery of the Liver; Seba, J. D., Bland, Spina Bifida; Stauffer, W. H., St. Louis, The Importance of Post-Operative Treatment in Diseases of the Rectum; Shy, M. P., Knobnoster, The Country Doctor and Appendicitis; Triplett, J. S., Harrisonville, Medical Reformation; Von Quast, Ernst, Kansas City, The Limitations of Surgical Interference; Walter, F. E., Perry, The Etiology and Cure of Hysteria.

COUNTY SOCIETY NOTES.

CHARITON COUNTY MEDICAL SOCIETY.

Chariton County Medical Society convened in regular session at Salisbury on January 25th with Dr. Kirkpatrick of Dalton in the chair. There was a good attendance of the members. Dr. Gordon Brown of Triplett was elected to membership. The committee on year book was instructed to have copies printed for the use of the members.

Dr. Austin of Brunswick presented a case of "Exophthalmic Goitre" in a girl twenty years of age. All the members entered into the discussion of this case and it proved to be very interesting and instructive. Dr. Kirkpatrick reported a case of "Subclavicular Dislocation of the Humerus" in a man aged sixty-six years. The dislocation was reduced fourteen months ago, but there remained inability to elevate the arm. In the discussion Dr. Austin thought there was a nervous rheumatic trouble and believed the case would get well in the course of time. Dr. Welch said that probably some ligaments had been ruptured either at the time of the injury or when reducing the dislocation. He believed there was an exudate and probably adhesions present and that there has not been time for repair. The age of the patient is against him. Dr. Tatum agreed with Dr. Welch's opinion and thought that the exudations and adhesions were responsible for the condition present. He advised the use of the x-ray for a more perfect diagnosis.

The next meeting will be held in Salisbury on Thursday, the 22nd of February.

C. A. Jennings, Secretary.

COOPER COUNTY MEDICAL SOCIETY.

The Cooper County Medical Society met in regular monthly session in the offices of Dr. R. L. Evans, at Boonville, on February 6th, Vice President F. R. Smiley in the chair. Members present: Drs. F. R. Smiley, R. L. Evans, J. R. Lionberger, J. S. Parrish. Dr. H. V. Cordry, physician to the Missouri Training School for Boys, was a most welcome visitor.

Several interesting clinical cases were presented and much profitable discussion followed in which many points in the treatment of the several cases presented were brought out. Considering the number of members present the meeting was an entire success, and it is to be regretted that the bad condition of the roads prevented many members from attending, many of whom notified the secretary of their desire to come, and expressed regret of their inability to attend.

The board of censors having found that Dr. H. A. McDonald of Pisgah, was eligible for membership, his name was duly presented. A vote resulted in his election to membership, and the secretary was ordered to notify the doctor of his election.

The name of Dr. H. V. Cordry, of Boonville, was presented for membership, and referred to the board of censors. There being no further

business before the society, the meeting adjourned to meet Tuesday, March 6th, 1906.

J. R. Lionberger, Secretary.

HOWARD COUNTY MEDICAL SOCIETY.

Howard County Medical Society met at Fayette on February 2nd, the president, Dr. Bonham, in the chair. Members present: Drs. Wright, Lewis, Lee, N. E. Smith, Bonham, and Watts. Visitors: Drs. Burguin and Munn.

Dr. Burguin was requested to prepare a paper on "The Doctor as a Life Insurance Examiner" and read it at our March meeting. Dr. Wright was requested to prepare a paper on "Syphilis" and Dr. N. E. Smith a paper on "Colles's Fracture," these three papers to be read at the meeting on March 2nd. Dr. Smith reported a case of gun-shot wound of the right lung. Dr. C. O. Lewis reported a very interesting case of albuminuria and Dr. Bonham reported a case of ulcer of the leg.

The next meeting of the Society will be held on March 2nd.

C. W. Watts, Reporter.

HOWELL COUNTY MEDICAL SOCIETY.

Howell County Medical Society met in regular session on February 1st. There was a full attendance.

Excellent papers were read by Dr. D. J. Nichols on the "Treatment of Pneumonia;" Dr. R. S. Spears on "Sprains of Ankle," and Dr. H. J. Rowe on "Gastric Catarrh." These papers were generally discussed.

Dr. J. P. Williams, Willow Springs, and Dr. M. B. Chandler were elected members of the society.

Adjourned to meet April 5th.

H. C. Shuttee, Reporter.

JACKSON COUNTY MEDICAL SOCIETY.

MEETING OF JANUARY 23, 1906

The Jackson County Medical Society met in the University building Tuesday, January 23rd, the president, Dr. E. H. Thrailkill, in the chair. Forty-seven members were in attendance at this meeting.

Application for membership were received from Drs. P. A. Johnstone, John Fowlston and W. E. Mabry, and referred to the membership committee.

The following were elected to membership: Dr. Annie J. Scott, Dr. J. E. Donaldson, Dr. J. H. Donaldson, Dr. W. L. Hoagland, Dr. B. A. Lieberman, Dr. Loren Swaney, Dr. Theodore S. Blakesley, and Dr. E. Lee Harrison.

An amendment to the By-laws providing for weekly meetings to be held every Tuesday evening, was adopted by the vote of the society.

Dr. C. B. Hardin, chairman, reported upon the consideration by his committee of the president's annual address; the following recommendations were emphasized: Change in the order of business, placing the Professional Program first; efforts to protect for the present, and later to improve the Medical Library; judicious management of the City Hospital; medical legislation, especially as regards advertisers and the criminal practices of irregulars; the securing a home for

the society, and the merger of the Kansas City Academy of Medicine and the Jackson County Medical Society.

Scientific Program: Dr. W. H. Coffey read a paper entitled "The Prophylaxis of Rectal Diseases." In the absence of Dr. C. J. Morrow, the discussion was opened by Dr. J. M. Frankenburger, Drs. Franklin E. Murphy, J. M. Langsdale, Fannie J. Henry, Dora Greene-Wilson, F. H. Brunig, E. von Quast, E. L. Stewart, and E. H. Thrailkill also taking part. Dr. Coffey closed the discussion.

Dr. Herman E. Pearse, who was to report a case of gun-shot wound of the intestine was unavoidably absent.

Dr. J. H. Laning reported a case of "Syphilitic Angina" which was accompanied by an infection resembling diphtheria very closely; some paralysis of the throat muscles followed the acute disease, though the Klebs-Loeffler bacillus was not clearly demonstrated The patient recovered under antisyphilitic treatment. In the absence of Dr. Gaines, Dr. Franklin E. Murphy opened the discussion, Drs. Hardin, Frick, von Quast, Stewart and Brunig also taking part. The discussion was closed by Dr. Laning.

The society adjourned until its next regular meeting, January 30th, 1906.

MEETING OF JANUARY 30, 1906.

The regular weekly meeting of the Jackson County Medical Society in the club room of the Atheneum, University building, Tuesday, January 23rd, the president, E. H. Thrailkill, in the chair. Seventy-seven were in attendance at this meeting.

Applications for membership were received from Drs. A. L. Hearst, J. W. Green, R. L. St. Clair, and H. D. Hamilton and were referred to the board of censors.

Scientific Program: "A Symposium on Lobar Pneumonia," proved exceedingly interesting and instructive. Dr. John Wilson gave some valuable statistics relative to the disease and its complications: Dr. Franklin E. Murphy presented in detail the morbid histology of the lesions of the disease, and its etiology. Dr. H. D. Jerowitz considered the diagnosis; Dr. E. W. Schauffler discussed the prognosis and conditions altering the same, while Dr. B. H. Wheeler outlined the treatment. (This Symposium appears in this issue of the JOURNAL, see page 592).

Dr. R. T. Sloan opened the general discussion, Drs. Scott P. Child, E. von Quast, A. A. Freyman, A. Miller, E. L. Stewart, and J. J. Clausen also taking part. The respective essayists in turn closed the discussion.

MEETING OF FEBRUARY 6, 1906.

The Jackson County Medical Society held its regular weekly meeting in the University building, Tuesday evening, February 6, 1906, President Dr. E. H. Thrailkill in the chair. There was an attendance of sixty-five at this meeting.

Dr. John Fowlston, Dr. P. A. Johnstone, and Dr. J. R. Kistler were elected to membership.

Dr. C. B. Hardin introduced a motion in writing to so amend the constitution and by-laws of the Jackson County Medical Society as to provide for the election of an execu-

tive committee, whose duty it shall be to deliberate upon matters of interest and present their report for action to the society in executive session. This motion was laid upon the table until a copy of same shall have been sent by the secretary to each member of the society.

Dr. Scott P. Child presented a resolution that this society request the editors of the various local newspapers to refrain from indiscriminately publishing the names of members of the Jackson County Medical Society in connection with any cases or interviews on medical subjects in which the latter might be engaged. After some discussion by Drs. Langsdale (con) A. A. Freyman (pro) and the secretary (pro), the motion was lost by vote of the society.

Dr. St. Elmo Sanders made a few remarks with reference to the prosecution of criminal abortionists, recommending that the Jackson County Medical Society lay aside a fund for that especial purpose. A motion by Dr. D. L. Shumate, duly seconded, prevailed, that the society reimburse Dr. Sanders for expenses incurred by him recently in some cases against suspected abortionists, and to render him moral and financial support in the future.

The first number on the scientific program was "The Report of a Case of Hemophilic Hematuria," by Dr. Eugene King. Dr. St. Elmo Sanders followed with the presentation of a case of "Splenic Anemia." Dr. Ben Jacobs read a report of a case of "Pernicious Anemia," and Dr. A. A. Freyman read a paper on "The Treatment of Anemia and Chlorosis." The discussion on each of the numbers successively was opened by Dr. E. G. Mark in the absence of Dr. B. H. Zwart; Drs. C. C. Conover, Frank J. Hall and C. S. Merriman. Dr. Franklin E. Murphy opened the general discussion and was followed by remarks from Dr. A. E. Hertzler, Drs. Sanders, Jacobs, and Freyman closed the discussion.

MEETING OF FEBRUARY 13, 1906.

The Jackson County Medical Society held its regular meeting Tuesday, February 13th, 1906, the president, E. H. Thrailkill, in the chair. Seventy-five were in attendance at this meeting.

Previous to the regular program, Dr. J. N. Scott presented to the society a case of "Lupus of the Nose," in which the progress of the disease had been arrested by treatment with the x-rays.

The application of Dr. J. H. Ralston for membership was received and referred to the board of censors.

The scientific program consisted of a symposium on the subject "Gastric Ulcer." The etiology and pathology were discussed by Dr. A. E. Hertzler. The medicinal treatment was outlined in a very excellent paper by N. P. Wood of Independence. The surgical treatment was considered in detail and in a very creditable manner by Dr. E. F. Robinson, in the absence of Dr. Jabez N. Jackson, who was out of the city. Two cases of gastric ulcer, one of which was accompanied by a malignant growth were reported by Dr. Howard Hill; in both cases gastroenterostomy was performed and was followed by improvement. Dr. William K. Trimble presented a specimen of multiple ulcer of the thrombotic variety.

Dr. O. H. Dove opened the general discussion, Drs. J. F. Binnie, R. T. Sloan, Frank J. Hall, Franklin E. Murphy, W. J. Frick and Charles H. Lester also taking part. The discussion was closed by the respective essayists.

MAX GOLDMAN, Secretary.

KNOX COUNTY MEDICAL SOCIETY.

The regular meeting of the Knox County Medical Society was held on February 3rd, Dr. L. S. Brown, presiding. Inclement weather and bad roads prevented a number of the members from being present.

The application for membership of Dr. W. F. O'Connor of Baring was received. Dr. Jas. Myers was appointed by the president to fill a vacancy in the board of censors. On motion the meeting adjourned until the first Monday in March.

HY J. JURGENS, Secretary.

MARION COUNTY MEDICAL SOCIETY.

Marion County Medical Society met in regular session on February 2nd at Hannibal. Quite a large number of the members were present.

Dr. J. N. Primm read a paper on "La Grippe" which brought out a very interesting discussion. Dr. J. J. Farrell reported a case of "Empyema" in a child nine months old. Resection of the rib and drainage was instituted but the patient died within eight hours after the operation.

Dr. J. J. Bourn reported a case of "Fistula-in-Ano" and "Hydrocele" in an infant six weeks old. The hydrocele was relieved by injecting two drops of pure carbolic acid.

Dr. A. J. Detweiler presented his transfer from Boone County Medical Society and was admitted as a member. The subject of an annual banquet was discussed and it was decided to have the banquet at the Mark Twain Hotel on February 15th.

The members are manifesting a great deal of interest in the society and the prospects seem excellent for a prosperous year.

E. H. ROUNDS, Reporter.

NEW MADRID COUNTY MEDICAL SOCIETY.

Regular meeting of the New Madrid County Medical Society was held at New Madrid, February 1st. Members present: Drs. O'Bannon, Watson, Williams, Hollenbeck, Mayfield and Sparhawk. After reading and approving of minutes of the previous meetings, election of a board of censors was held with the following result: Drs. Williams, Hollenbeck and Mayfield for terms of three, two and one year respectively. Following this there was some discussion on business matters.

As there was no regular program for the evening, the chair asked for reports of any new or peculiar cases. Dr. Sparhawk told of a case of "Vitiligo" in a fourteen year old negro boy. Dr. Hollenbeck reported a case of "Pyosalpinx" complicating gonorrhea. On motion the next meeting will be held at Portageville.

After the meeting a supper was prepared for the out of town members by the members residing in New Madrid. This was greatly appreciated and enjoyed by all.

W. J. SPARHAWK, Reporter.

PLATTE COUNTY MEDICAL SOCIETY.

The regular monthly meeting of Platte County Medical Society met Wednesday, February 7th, in Platte City. The following members were present: Drs. Chastain, Barr, Naylor, Davis, Redman and G. C. Coffey. The minutes of the previous meeting were read and approved. A very interesting clinic was presented consisting of a case of fibroid of the uterus of eight years' duration.

After much discussion it was agreed to have a class in post graduate work in the society for the next year. Next month's program will be a general discussion on "Antipyretics" and "Percussion and Auscultation of the Chest."

Dr. H. M. Clark of Platte City, Dr. P. S. Gardner of Waldron and Dr. C. E. Benham of Parkville were unanimously elected as members of the society.

The committee on Public Health and Legislation was instructed to turn over to the prosecuting attorney the names of all who were practicing medicine in the county without a license.

The action of the American Medical Association, *Collier's Weekly* and the *Ladies' Home Journal* in exposing the patent medicine frauds was indorsed.

Adjourned to meet in Platte City Wednesday, March 7, 1906.

ADDRESS BY THE PRESIDENT, DR. C. H. CHASTAIN.

I heartily appreciate the honor you have bestowed upon me by electing me president of this society for the ensuing year.

I am going to begin my duty today by telling you briefly what I think this society should be and I hope that when I have finished I shall have the hearty co-operation of every member of the society, and that before this year is ended we will have a larger and better organization than we have now.

You will all agree with me when I say that the object of this, as well as the State and the American Medical Associations, is to lift the medical profession out of the channel into which it has been placed and running for the past few years, and put it in the highest place of honor, where it once was and should have remained; and having accomplished this, to maintain its position by holding the principles of medical ethics so high that charlatanism in any form can not touch it.

To do this our society must live up to the constitution and by-laws which it has adopted.

One great trouble is that the quacks are better organized than is the medical profession. Any one who chooses can be a quack, but it takes a gentleman to be a professional man.

The greatest trouble is that quacks are allowed to become members of these associations and that the associations are working against themselves by allowing quacks to remain in them; by so doing these organizations have lost their dignity and the whole thing becomes a farce.

The public has come to look upon the medical man as a hired man and will demand a diagnosis, and when it is given, as it should never be

hastily, they will suggest the treatment.

If you object they will go to doctor somebody, who has an advertisement as long as your arm in every paper in the country, and will take his diagnosis and pay him more than they will the family physician. I say the profession is to blame for the present state of affairs, and the profession it is that will have to get right before it can expect the proper respect and confidence of the people.

Is it not a fact that here in our own county men who are graduates in medicine have fallen so low as to use the cloak of an honorable professional man to boot-leg whiskey to the public? Can you conceive of anything more degrading to a profession which, when legitimately followed, calls you into the inside secrets of the family life, places you in a position of confidant and counsellor to those who employ you —a position of sacred trust which is invested in no other profession.

Then comes the abortionist and all other disreputable and obnoxious persons who have the gall to stand behind the diploma, making drunkards and committing murders for the dollar and calling themselves Doctors of Medicine. It is this class of worse than thugs that cut the fees of a legitimate practice for the simple reason that they do not depend upon legitimate practice for a living. Older men in the profession can tell you of the time when a doctor of medicine was the most respected man in the community. Is it so now? I say it is not; and I have given the cause for the downfall. It has been said in this room that the Platte County Medical Society wanted every licensed practitioner in the county to become a member of this organization; I am certain this was not thought of before it was said—for you all know that there are licensed men in this county, as well as in every other county, whose membership in any ethical society would pollute it to such a degree that it would be unfit for a gentleman to belong to.

There are also men who do not belong to the society who are worthy and would be an honor to any organization they choose to join; gentlemen, it is the latter class we want in this society, and if we keep it clean it is the kind we will have.

In conclusion I wish to suggest that instead of having programs printed each month we commence next meeting and make the remainder of this year a post-graduate course by taking up anatomy, physiology and pathology, knowing each month what is to take place the next and make it a society of research and learning which will benefit all; also, to instill into our meetings at stated intervals social meetings not only for the medical but the other professions.

G. C. Coffey, Secretary.

ST. LOUIS MEDICAL SOCIETY.

MEETING OF JAN. 20, 1906.

The committee on public health and legislation made a report and recommended that the matter of medical inspection of public schools, in which they have been for several months trying to interest the school board, but without effect, be referred to the joint medical council

for action. The report was adopted by the society. It is proposed, if possible, to get the school board to institute a system of medical inspection similar to that in operation in many other cities. It seems strange that in a matter of such importance to the life and health of the school children of our city, the board of education should be so indifferent.

Dr. Malvern B. Clopton read a paper entitled "Osteitis Deformans." The doctor gave an excellent description of the pathological changes which take place in this rare disease of which so little is definitely known, and reported two cases which had come under his observation. The paper was discussed by Drs. Allison, Warfield, Wells, Schwab, Grindon and Hoge.

Dr. Julius F. Menestrina read a paper entitled "Are We Conservative in Removing Bony Structure from the Foot for Drainage in Sepsis." The essayist first considered the anatomy of the foot and from that showed how hard it often is to secure drainage in septic troubles in this location without removing bony structure and concluded that it is conservative surgery. Discussion by Drs. Morfit, Funkhouser, Grindon and Sharpe. Attendance 62.

MEETING OF JAN. 27TH.

After the reading of the minutes and reports of various committees, the society listened to the reading and discussion of two very interesting papers. The first "Ocular Manifestations of Syphilis," by Dr. Carl Barck, is a valuable contribution to the literature on this subject. This disease causes 15 per cent of all blindness, 50 per cent or more of all cases of iritis, quite a large per cent. of keratitis, and many other forms of eye trouble; indeed, no structure of the eye is exempt from syphilitic inflammation, and from the discussion of the paper one would judge that it is the rule among oculists, in obscure cases, to institute anti-syphilitic treatment. The paper was discussed by Drs. Henderson, Grindon, Green, Shoemaker, Murphy and Jennings.

Dr. James Mores Ball read the second paper entitled "Report on a Case of Subhyaloid Hemorrhage." He reported a case now under treatment, and presented a picture of the fundus of the eye, clearly showing the outline of the clot. He stated that the prognosis as to recovery of sight was good—much better than where the hemorrhage is in the substance of the retina. Discussion by Drs. Green, Barck, Henderson and Jennings. Attendance 76.

MEETING OF FEB. 3RD.

The greater part of the time at this meeting was taken up in the discussion and adoption of a proposed amendment to the city charter intended to divorce the city medical institutions from politics.

The following candidates were elected to membership: Floyd W. Bennett, 2828 St. Vincent Avenue; Joseph W. Charles, Humboldt Building. William Engelbach, Mermod-Jaccard Building. A. E. Ewing, 5956 Cabanne Avenue. M. George Gorin, 4225 West Belle Place. E. E. Holt, 1532 Franklin Avenue. Harry W. Loewinstein, 2615 N. Taylor Avenue. S. E. Newman, 465 N. Taylor Avenue. Edward H. Skinner, 2313 Washington

Avenue. O. H. Brown, Grand Avenue and Caroline street. George S. Drake, Jr., Humboldt Building. John L. Evans, 1600 California Avenue. Walter Fischel, City Hospital. Fred B. Hall, 2917 Washington Avenue. F. C. E. Kuhlmann, 2135 St. Louis Avenue. A. P. Munsch, 1504 Wagoner Place. Eugene T. Senseny, 2829 Washington Avenue. Waldemar Ude, 3531 S. Grand Avenue.

The society then took up the scientific program as prepared by the executive committee. Dr. George Homan read a paper "Remarks on Hook-Worm Disease (Uncinariasis) with Report of Case." He entered fully into the etiology, pathology, symptomatology, and treatment of this disease, which is very rare in Missouri, but of frequent occurrence in the southern Atlantic and Gulf States. It is only a few years since the cause was discovered to be an intestinal parasite, and the proper treatment (menthol in large doses), instituted. The case reported was a man who contracted the disease in Alabama eighteen or twenty years before coming under Dr. Homan's observation. Discussion by Drs. Warfield, Green and Meisenbach.

Dr. R. B. H. Gradwold made some remarks on "A Newly Discovered Intestinal Parasite," illustrated by pictures of the worm and its eggs. The doctor found the worm in a chimpanzee; it is cyst-forming in its nature and the doctor believes he is the first to discover and describe it.

Owing to the late hour the reading of a paper by Dr. John C. Morfit, entitled "Graft in Medicine," was postponed until a future meeting. Attendance 103.

MEETING OF FEB. 10TH.

The society was called to order at 8:15 p. m., the president, Dr. Geo. Homan, in the chair. Minutes of previous meeting read and approved.

The following candidates were elected to membership: Dr. N. W. Amos, 3001 Olive St.; Dr. W. J. Miller, 3414 Park Ave., and Dr. Louis N. Temm, 3514 N. Market St.

The committee on publication and debate reported that they had submitted a proposition to several medical journals for the publication of the society proceedings. The JOURNAL MISSOURI STATE MEDICAL ASSOCIATION having complied with their requirements they therefore moved that it be made the official organ of the society. Motion carried.

The committee having in charge the prosecution of the advertising quacks, reported the progress which has been made along this line, and moved that they be authorized to instruct Mr. Barth, the attorney who has been looking after the interests of the society, to continue to assist the city attorney, not only in the prosecution of these advertisers, but also to bring suit against the newspapers publishing such advertisements. Motion carried.

This committee is doing a great work; already a number of the objectionable advertisements have dropped out, many of the remaining have been greatly changed. It is reported that one paper has cancelled advertisements of this character to the amount of $15,000, and the end is not yet. The committee also moved that the St. Louis Medical Society invite all other medical, surgical and dental societies of the

state to co-operate with us, in an attempt to oust from the state all corporations now practicing medicine, surgery and dentistry unlawfully. Motion carried. It is said that this can be easily accomplished and has the sanction of the Assistant Attorney General.

The scientific program consisted of a symposium—"The Control of Infectious Diseases." The part assigned to Dr. C. A. Snodgras, Health Commissioner, was "Municipal Control of Infectious Diseases." The doctor read and commented on the different ordinances relating to the subject and explained the working of the health department.

Dr. A. S. Bleyer—"The Duties of the Practicing Physician to the General Public in Infectious Diseases." The doctor touched on the milk supply, ventilation of public buildings and conveyances, isolation and disinfection.

Dr. C. H. Powell on "Obligation of the Practicing Physician to His Patient and the Patient's Family in Infectious Diseases." This paper dealt with isolation, disinfection, food and water supply, vaccination, and the use of diphtheria antitoxine not only as a curative agent, but also as a prophylactic.

Dr. W. G. Moore—"Duties of the Board of Education in the Control of Infectious Diseases." Dr. Moore discussed medical inspection of schools, vaccination, the return of children to school after recovery from infectious diseases, and teaching the children in regard to these subjects, thus through the children reaching the parents.

The papers brought out a very general discussion. We hope that our executive committee will give us many more scientific programs similar to this, as it is certainly very profitable as well as entertaining.

MEETING OF FEB. 17TH.

Dr. P. Y. Tupper was elected to fill the vacancy in the committee on ethics, caused by the death of Dr. E. H. Gregory.

Prof. W. J. McGee read a paper entitled "A Case of Thirst, based on Recent Observations in the Arid Regions." The case reported was that of a Mexican, who was on the desert eight days with only one day's supply of water. The professor described very minutely the conditions and symptoms of this case which breaks all records as to length of time one can live without water, the great majority of cases dying within three days. This was a very interesting and instructive paper. Discussion by Drs. Funkhouser, Barclay, Homan, Moore, Boisliniere, Sutter, Kieffer, Henderson, Gellhorn, Goodloe, Fleming and Glasgow.

The second paper of the evening, "Graft in Medicine," by Dr. John C. Morfit, was also an interesting one, although the doctor only discussed one of the many phrases of this subject, viz., the division of fee between the specialist and the general practitioner—this he condemned in very strong terms as unethical and degrading to the medical profession. Discussion by Drs. Moore, Barclay, Dorsett, Green, Glasgow, Kieffer and Tuttle.

MEETING OF FEB. 18TH.

The society met in special session, at the Y. M. C. A. building, for the

purpose of holding memorial services in honor of the late Dr. Elisha Hall Gregory, who died at Ormond, Fla., Feb. 11, 1906.

By the death of Dr. Gregory the St. Louis Medical Society loses one of its oldest and most valued members. He was a teacher of medicine for over fifty years, surgeon in chief of Mullanphy Hospital for half a century, ex-president of the St. Louis Medical Society, St. Louis Surgical Society, Missouri State Medical Association, State Board of Health and of the American Medical Association.

Following the introductory remarks by the president, Dr. Geo. Homan, an invocation was pronounced by Archbishop J. J. Glennon, after which His Grace made some remarks on the life and character of Dr. Gregory. Dr. David C. Gore, president of the Missouri State Medical Association, spoke on "Dr. Gregory as a Physician and Surgeon;" Hon. A. M. Dockery, former governor of Missouri, on "Dr. Gregory in His Civic Capacity;" Dr. W. G. Moore on "Dr. Gregory as a St. Louisan;" Dr. Frank J. Lutz on "Dr. Gregory as a Medical Teacher."

The report of the committee on memorial and resolutions was read and adopted, after which society adjourned.

I. E. Graham, Reporter.

ST. LOUIS COUNTY MEDICAL SOCIETY.

The St. Louis County Medical Society held the second regular meeting of 1906 on February 14th, at 2:30 p. m., at Clayton.

After approval of minutes of December and January meetings, the order of business was temporarily suspended and reports heard from various committees.

Report of committee on meeting place was read by Chairman Wyer. This committee did not render a definite report. Rooms at Kirkwood, Maplewood and Clayton were considered, consensus of opinion favoring the change to Kirkwood. After considerable discussion it was moved to delay vote on the matter until the next regular meeting, the secretary to instruct absent members to that effect.

Report of committee on Revision Fee-Bill was read and after a few minor corrections was adopted as read. Owing to the lateness of the hour Dr. Wyer's paper on "Lobar Pneumonia" was read in part only; the remainder will be read at the next meeting.

AMERICAN MEDICAL ASSOCIATION.

Next Annual Meeting at Boston, Mass.
President-Elect: WM. J. MAYO, Rochester, Minn.
President: LOUIS S. McMURTRY, Louisville, Ky.
First Vice-President: WALTER WYMAN, Washington, D. C.
Secretary and Editor: GEORGE H. SIMMONS, 103 Dearborn Ave., Chicago.
Treasurer: FRANK BILLINGS, Chicago.

MISSOURI STATE MEDICAL ASSOCIATION.

Next Annual Meeting, Jefferson City, May 15, 16, 17, 1906.
President: D. C. GORE, Marshall, Mo.
Vice-Presidents:
C. D. AVERY, Troy; J. P. BURKE, California; F. A. GLASGOW, St. Louis; T. F. LOCKWOOD, Butler; E. LOWREY, Excelsior Springs.
Secretary: C. M. NICHOLSON, St. Louis.
Assistant Secretary: E. J. GOODWIN, St. Louis.
Treasurer: J. FRANKLIN WELCH, Salisbury.

COMMITTEES.

Committee on Scientific Work.
C. M. Nicholson, Chairman; E. L. Chambliss, A. R. Kieffer.
Publication Committee.
C. M. Nicholson, Chairman; F. J. Lutz, B. M. Hypes, W. B. Dorsett.
Committee on Public Policy and Legislation.
F. J. Lutz, Chairman; W. S. Allee, H. E. Pearse.
Committee on Arrangement.
Drs. I. N. Enloe, A. W. McAlester, C. M. Chastain, J. P. Porth, G. Ettmueller, J. L. Thorpe, C. P. Hough.

COUNCILLOR DISTRICTS AND LIST OF COUNTIES IN EACH DISTRICT.*

First District.—F. B. Hiller, Kahoka. Counties: Clark, Scotland, Schuyler, Adair, Knox, *Lewis*.

Second District.—J. D. Brummall, Salisbury. Counties: Linn, Carroll, Chariton, Livingston, Grundy, Sullivan, Mercer, Putnam.

Third District.—E. H. Miller, Liberty. Counties: Clay, Ray, Platte, Clinton, Caldwell, *DeKalb*, *Gentry*, Harrison, Worth, Daviess.

Fourth District.—C. H. Wallace, St. Joseph. Counties: Buchanan, Holt, Atchison, Nodaway, Andrew.

Fifth District.—L. W. Dallas, Hunnewell. Counties: Macon, Shelby, Marion, Randolph, Monroe, Ralls.

Sixth District.—Woodson Moss, Columbia. Counties: Audrain, Callaway, Montgomery, Warren, Pike, Boone, Howard, St. Charles.

Seventh District.—W. B. Dorsett, St. Louis. Counties: St. Louis, Lincoln.

Eighth District.—F. J. Lutz, St. Louis. Counties: Franklin.

Ninth District.—B. M. Hypes, St. Louis. Counties: Jefferson, Washington, *St. Francois*, Reynolds, Iron, Perry, St Genevieve.

Tenth District.—J. J. Norwine, Poplar Bluff. Counties: Mississippi, New Madrid, Wayne, Stoddard, Dunklin, Butler, Ripley, Carter, Pemiscot.

Eleventh District.—W. D. Porterfield, Jr., Cape Girardeau. Counties: *Bollinger*, Scott, Madison, Cape Girardeau.

Twelfth District.—W. S. Allee, Olean. Counties: Miller, Morgan, Maries, Cole, Moniteau, Camden, Osage, Gasconade.

Thirteenth District.—R. D. Haire, Clinton. Counties: Pettis, Lafayette, Henry, St. Clair, Benton, Saline, *Hickory*, Cooper.

Fourteenth District.—M. P. Overholser, Harrisonville. Counties: Jackson, Cass, Bates, Johnson.

Fifteenth District.—A. R. Snyder, Joplin. Counties: McDonald, Newton, Jasper, *Dade*, Barton, Cedar, Vernon.

Sixteenth District.—R. L. Johnson, Rolla. Counties: *Dallas*, Crawford, Phelps, Pulaski, Laclede, *Dent*.

Seventeenth District.—J. E. Tefft, Springfield. Counties: Greene, *Christian*, *Stone*, *Barry*, Lawrence, *Webster*, *Polk*, *Taney*.

Eighteenth District.—H. C. Shuttee, West Plaines. Counties: *Ozark*, *Oregon*, Howell, *Texas*, *Wright*, *Shannon*, *Douglas*.

*Counties in *Italic* are unorganized.